SONY

3-862-917-11 (1)

Glasstron

Operating Instructions US

Mode d'emploi FR

WARNING

YOUR FAILURE TO FOLLOW THESE OPERATING INSTRUCTIONS MAY RESULT IN EYE FATIGUE, EYE DAMAGE, OR OTHER INJURY.

CAREFULLY READ THIS INSTRUCTION MANUAL AND BECOME FAMILIAR WITH ALL SAFETY INSTRUCTIONS FOR THIS PRODUCT.

THIS PRODUCT SHOULD NOT BE USED BY CHILDREN AGE 15 OR YOUNGER.
IF YOU HAVE BEEN DIAGNOSED WITH EYE DISEASE OR EYE INJURY, CONSULT YOUR DOCTOR BEFORE USE AND DO NOT USE WITHOUT YOUR DOCTOR'S APPROVAL.

AVERTISSEMENT

LE NON-RESPECT DES PRESENTES INSTRUCTIONS D'UTILISATION IMPLIQUE DES RISQUES DE FATIGUE, DE BLESSURE OU AUTRES AUX YEUX.

LISEZ ATTENTIVEMENT LE PRESENT MODE D'EMPLOI ET FAMILIARISEZ-VOUS AVEC TOUTES LES INSTRUCTIONS DE SECURITE AFFERENTES.

CET APPAREIL NE PEUT ETRE UTILISE PAR DES ENFANTS AGES DE 15 ANS OU MOINS. SI VOUS SOUFFREZ DE MALADIES OU D'AFFECTIONS OCULAIRES, CONSULTEZ VOTRE MEDECIN AVANT D'UTILISER CET APPAREIL ET NE L'UTILISEZ PAS SANS L'AUTORISATION DE VOTRE MEDECIN.

Personal LCD Monitor

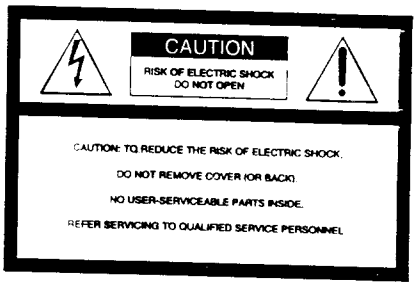
PC Glasstron™

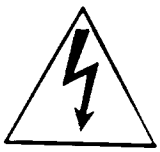
PLM-S700

© 1998 by Sony Corporation

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING

The AC power cord must be changed only at qualified service shop.

The nameplate is located on the bottom of the power supply box.

Use a commercially available AC plug adapter, if necessary, depending on the design of the wall outlet.

CAUTION

To prevent electric shock, match wide blade of plug to wide slot, fully insert.

The shielded interface cable recommended in this manual must be used with this equipment in order to comply with the limits for a digital device pursuant to Subpart B of Part 15 of FCC Rules.

CAUTION

You are cautioned that a changes or modifications not expr approved in this manual could voic ur authority to operate this equipmen

INFORMATION

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Declaration of Conformity

Trade Name:	SONY
Model No.:	PLM-S700
Responsible Party:	Sony Electronics Inc.
Address:	1 Sony Drive, Park Ridge, NJ07656 USA
Telephone No.:	201-930-6970

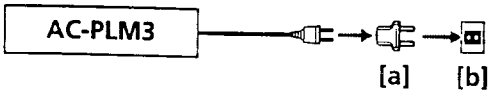
This device complies with part 15 of the FCC Rules.
Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and
(2) this device must accept any interference received,

including interference that may cause undesired operation.

Precautions

- One blade of the plug is wider than the other for safety purposes and will fit into the power outlet only one way. If you are unable to insert the plug fully into the outlet, contact your dealer.
- You can use your Glasstron in any country or area with the supplied AC power adapter within 100 V to 240 V AC, 50/60 Hz. Use a commercially available AC plug adapter [a], if necessary, depending on the design of the wall outlet [b].



DISPOSAL OF LITHIUM ION BATTERY.

LITHIUM ION BATTERY.
DISPOSE OF PROPERLY.

You can return your unwanted lithium ion batteries to your nearest Sony Service Center or Factory Service Center.

Note: In some areas the disposal of lithium ion batteries in household or business trash may be prohibited.

For the Sony Service Center nearest you call 1-800-222-SONY (United States only)
For the Sony Factory Service Center nearest you call 416-499-SONY (Canada only)

Caution: Do not handle damaged or leaking lithium ion batteries.

Owner's record

The model and serial numbers are located at the rear of the power supply box. Record these numbers in the spaces provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. _____

Serial No. _____

- IBM PC/AT and VGA are registered trademarks of IBM Corporation of the U.S.A.
- Microsoft, MS, MS-DOS and Windows® are registered trademarks of Microsoft Corporation in the United States and other countries.
- Macintosh is a trademark licensed to Apple Computer, Inc., registered in the U.S.A. and other countries.
- VESA is a trademark of Video Electronics Standard Association.
- All other product names mentioned herein may be the trademarks or registered trademarks of their respective companies. Furthermore, "™" and "®" are not mentioned in each case in this manual.

Glasstron is a brand-new concept in visual display

Congratulations on your purchase of a Sony Glasstron Personal Viewer. The Glasstron, using current technology in small, lightweight visual displays, provides a television viewing experience similar to watching a 30-inch television from a distance of approximately 4 feet in SVGA mode. (Viewing experience may differ according to individual perception.)

The Glasstron Personal Viewer creates an image through two separate liquid crystal displays, in close proximity to your eyes. To insure your safe use of the Glasstron, please become familiar with its basic operations, including proper fitting instructions, and be aware of any symptoms of eye fatigue or other discomfort you may experience.

Note on the LCD (Liquid Crystal Display)

The LCD screen is made with high-precision technology. However, black points or bright points of light (red, blue, or green) may appear constantly on the LCD screen. This is not malfunction. (Effective dots: more than 99.999%)

WARNING

YOUR FAILURE TO FOLLOW THESE OPERATING INSTRUCTIONS MAY RESULT IN EYE FATIGUE, EYE IMPAIRMENT, OR OTHER EYE INJURY, PROPERTY DAMAGE OR DEATH.

WARNING

THIS PRODUCT SHOULD NOT BE USED BY CHILDREN AGE 15 OR YOUNGER. THE EYES OF CHILDREN ARE STILL DEVELOPING AND MAY BE ADVERSELY AFFECTED FROM USE OF THIS PRODUCT.

Table of Contents

SAFETY INSTRUCTIONS 6

About the Glasstron 11

Getting Started

Checking the supplied accessories 13
Locating the parts and controls 14
Connecting the Glasstron
- Connecting the PC 15
- Connecting the video equipment 18
- Connecting the power source 20

Wearing the Glasstron 21
Turning on the Glasstron
- Checking the display unit position 23
- Checking the screen position alignment 25

Setting the password 28

Operations

Using the Glasstron 30
- Checking the display indication 32
- Screen warnings against overuse of the Glasstron 33

Viewing the surrounding environment 34
Adjusting the sound and picture
- Signal compatibility 35
- Adjusting the sound/picture 36
- Adjusting the RGB signal 39
- Adjusting the video signal 40
- Resetting the adjustment to the factory preset level 40

Using the optional battery pack 41

Additional Information

Precautions 43
Error messages 45
Troubleshooting 46
Specifications 48
Index 49

SAFETY INSTRUCTIONS

THE SONY GLASSTRON PERSONAL VIEWER SHOULD BE USED IN STRICT ACCORDANCE WITH ALL INSTRUCTIONS TO PREVENT EYE OR OTHER INJURY, LOSS OF VISUAL FUNCTIONS, PROPERTY DAMAGE, OR DEATH.

USE RESTRICTIONS

Warning: No Use by Children Age 15 or Younger.

This product is designed for adult use.
The eyes of children are still developing and may be adversely affected by use o this product, and it may cause eye fatigue, eye damage, or loss of visual functions.
In addition, this product may not be adjusted to fit a child's head.

Safety Password: To prevent use by children age 15 or younger, this product has been equipped with a safety password protection system. For instructions on the use of the password protection system see page 28.

Warning: Eye Disease/Eye Injury/Glaucoma.

If you have been diagnosed with or are susceptible to eye disease, eye injury, or glaucoma, consult your doctor before use and do not use without your doctor's approval. Use of this product by individuals with conditions such as glaucoma may cause these conditions to worsen.

Caution: Heart Disease/High Blood Pressure.

If you have a history of heart disease or high blood pressure, consult your doctc before use and do not use without your doctor's approval. Use of this product allows the viewer to feel they are in the action, which may result in increased anxiety or heart injury. If during viewing any increased anxiety is experienced, stop using the product immediately and rest. If the symptoms persist after rest, consult your doctor.

Caution: Seizures.

If you have a history of temporary spasms, unconsciousness, or epileptic seizures from light stimulation, consult your doctor before use and do not use without your doctor's approval. Use of this product by such individuals may cause spasms, unconsciousness, or seizures. If you experience such symptoms during use, stop using the product immediately and consult your doctor.

ADDITIONAL SAFETY INFORMATION.

A. Health Concerns. See pages 7 through 8.
B. Instructions for Safe Fit. See page 9.
C. Warnings for Electronic Products. See page 10.

Health Concerns

Warning: Eye Fatigue/Eye Damage/Loss of Visual Functions.

Misuse or overuse of this product may result in eye fatigue, eye damage, or loss of visual functions. Stop using if you feel tired or experience headaches or discomfort.

Warning: No Use by Children Age 15 or Younger.

This product is designed for adult use.
The eyes of children are still developing and may be adversely affected by use of this product, and it may cause eye fatigue, eye damage, or loss of visual functions.
In addition, this product may not be adjusted to fit a child's head.

Caution: Sickness/Headache/Nausea.

If during use you experience any of the following symptoms, stop using this product immediately and rest. These symptoms may indicate that you are misusing or overusing the product (see "Instructions for Safe Fit," page 9) or that you should not use the product for health reasons. If the following symptoms persist after rest, consult your doctor.

- sore eyes, eye fatigue, or double vision
- headache
- inability to focus on the screen
- nausea or motion sickness
- stiff or sore shoulders or neck

After six hours the product automatically turns off to prevent eye fatigue or eye damage. For instructions on these functions, see page 33.

Caution: Motion Sickness from Viewing Programmes.

Some viewers may experience motion sickness, headache, or nausea from viewing movies or video programmes, especially those with intense action and movement. If you feel any of these symptoms, stop using the product immediately. To avoid personal injury or injury to others, do not drive a car or motorcycle, nor do anything that requires concentration until the symptoms disappear.

Health Concerns

Caution: Motion Sickness from External Mot[illegible]

Do not use this product while subject to external motion – [illegible] r example, as a passenger in a car. Use of this product under these cond[illegible] s may cause motion sickness.

Caution: Accidents.

Do not use this product while walking, skating, bicycling, operating a motor vehicle or other power equipment, or while engaged in any other similar activity.
Use of this product under these conditions may result in an accident, injury, or death to yourself or others.

Caution: Sound Volume.

Avoid using headphones at high volume. Hearing experts advise against continuous, loud, and extended play. If you experience a ringing in your ears, reduce volume or discontinue use.

Instructions for Safe Fit

Warning: Proper Fit.

Each time this product is used adjustment screens will appear, requiring the viewer to properly fit the product. Proper fit means that an asterisk (*) will appear in each corner of the display. Failure to properly fit the product each time may result in eye fatigue, eye damage, or loss of visual functions and may result in accident or injury. For instructions on how to properly fit this product, see pages 23 through 27.

Warning: No Use by Children Age 15 or Younger.

This product is designed for adult use.
The eyes of children are still developing and may be adversely affected by use of this product, and it may cause eye fatigue, eye damage, or loss of visual functions.
In addition, this product may not be adjusted to fit a child's head.

Safety Password: To prevent use by children age 15 or younger, this product has been equipped with a safety password protection system. For instructions on the use of the password protection system, see page 28.

Warnings for Electronic Products

Caution: Electric Shock.

Failure to observe all operating and maintenance instructions may cause damage to your product and may result in property damage or injury or death from electric shock, fire, or other cause.

Caution: Do Not Disassemble.

Any required service on this product should be performed by a trained authorized servicer. Failure to comply with this warning may result in property damage or personal injury or death from electric shock, fire, or other cause.

Caution: Avoid Wet, Humid, Dusty and Smoky Environments.

This product may be adversely affected by wet, humid, dusty, and smoky conditions which may result in property damage, personal injury or death. Do not use this product near or around water. Avoid using or storing this product under these conditions.

Caution: Avoid High Temperature or Direct Sunlight/Avoid Mechanical Shock.

This product may be deformed by high temperature or direct sunlight and also by dropping the product or other mechanical shock. Avoid these conditions, as the screens may loose proper alignment and it may cause eye fatigue or eye damage.

Caution: Unplug the Product When Not in Use.

Always unplug this product when it will not be in use for extended periods of time or during vacations.

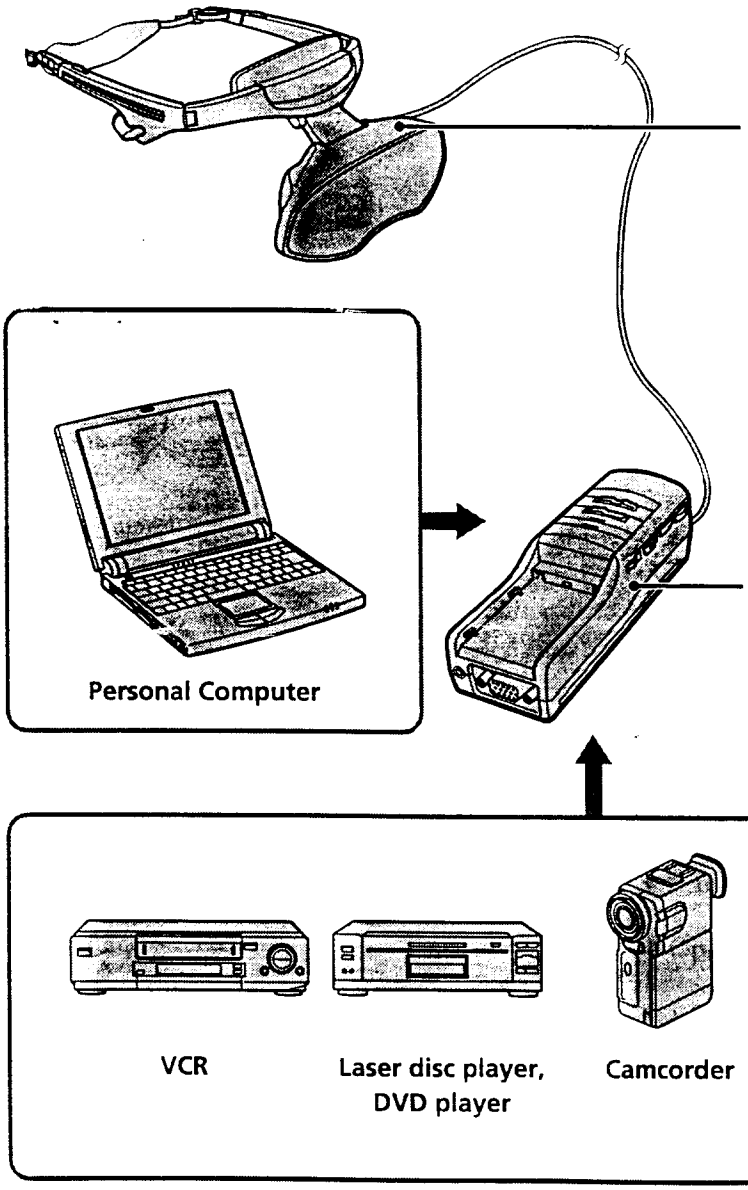
About the Glasstron

Caution: The screen is always right in front of you.

The Glasstron is a head-mounted display. With this type of display, the screen is always in front of you even if you move your head. Because of this feature, you can concentrate on the screen more easily compared with ordinary TVs, and you have a sense of being in the action.

- It is easy to adjust the Glasstron to your eyes. You can use the display unit even while wearing glasses.
- Every time you use the Glasstron, the adjustment screen appears to help you adjust the display unit properly. You can also check whether the left and right screen positions are properly aligned or not.
- Cautions appear on the screen about every two hours to remind you to check for eye fatigue. The power will automatically turn off if you do not press the PUSH DISPLAY jog dial. If you keep using the Glasstron continuously for six hours, a warning appears on the screen and the power will turn off automatically.

The Glasstron consists of the following items:



Display unit

The display unit is equipped with two small (left and right) LCDs.

Power supply box

You can supply power using the supplied AC power adapter or the optional Sony rechargeable battery pack.
When using with the Glasstron, connect your video equipment or PC to the connector on the power supply box.
You can adjust the sound volume.
You can also use the SEE-THROUGH control in order to see the surrounding environment.

continued

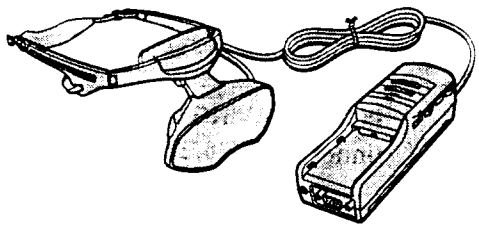
Features

- A powerful, big screen experience comparable to watching a 30-inch screen from approximately 4 feet (1.2 m) away (SVGA mode).
- You can connect the Glasstron, which is equipped with 1.55 million dot LCD, to your PC to see the screen of the PC in the SVGA or VGA screen mode.
- You can enjoy high quality picture when you connect the DVD player, or DV camcorder, etc.
- The see-through function allows you to see the surrounding environment while wearing the Glasstron.
- You can use the Glasstron while wearing glasses.
- Solid and lightweight components made of magnesium alloy, with the display unit weighing about 5.3 oz (120 g).

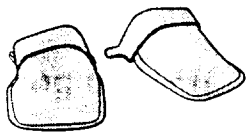
Checking the supplied accessories

Check that the following accessories are supplied with your Glasstron. If any item is not supplied, contact your Sony dealer or local authorized Sony service facility.

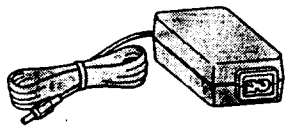
- Display unit/power supply box (1)



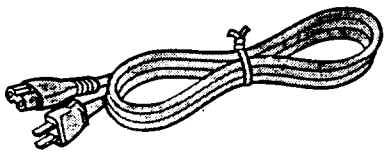
- Sunshades (1 pair)



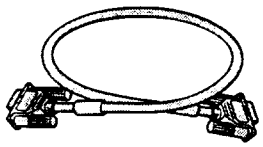
- AC power adapter AC-PLM3 (1)



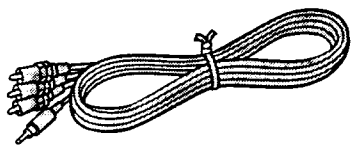
- AC power cord (1)



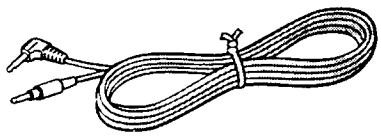
- RGB signal cable (HD15) (1)



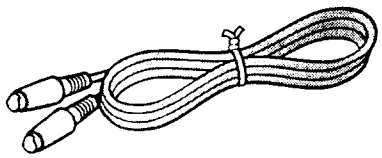
- Audio/video cable (special miniplug ⟷ phono plug) (1)



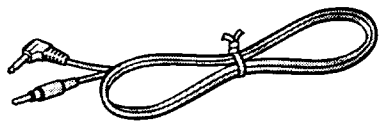
- Audio/video cable (special miniplug ⟷ special miniplug) (1)



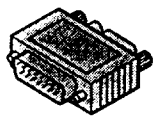
- S-video cable (1)



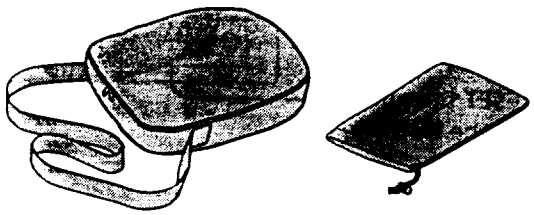
- Audio cable (stereo miniplug) (1)



- Macintosh adapter (1)



- Carrying cases (2)

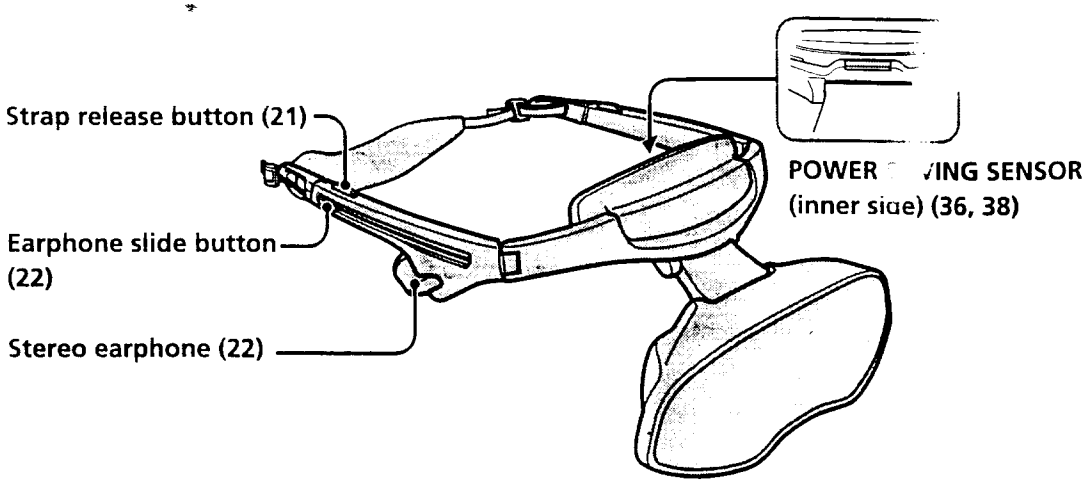


- Windows 95/Windows 98 PC Glasstron Information Disk (1)
- Screen adjustment disk for Macintosh (1)
- Operating instructions (1)
- Warranty (1)

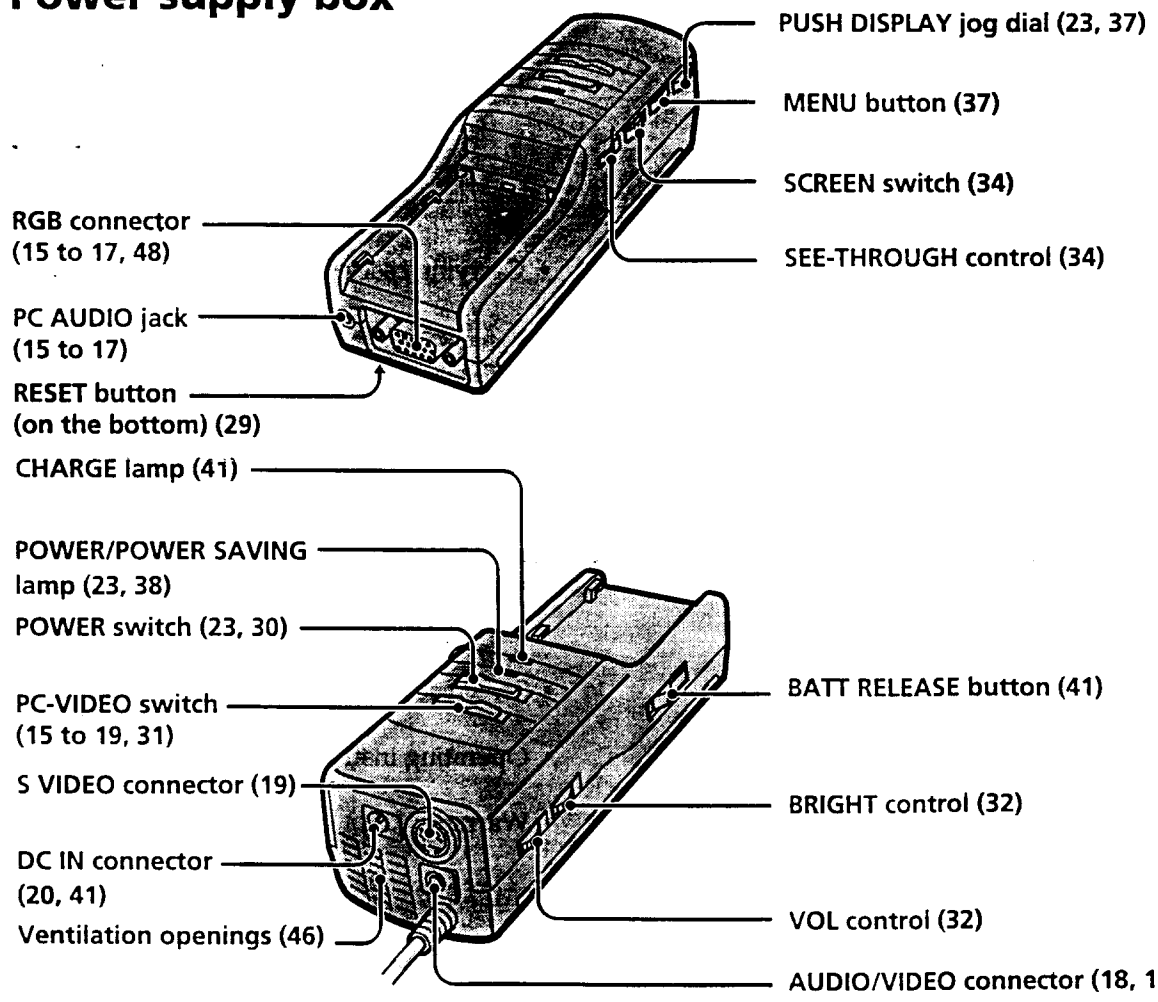
Locating the parts and controls

Refer to the pages indicated in parentheses ( ) for details.

Display unit



Power supply box


PUSH DISPLAY jog dial (23, 37)
MENU button (37)
SCREEN switch (34)
SEE-THROUGH control (34)
RGB connector (15 to 17, 48)
PC AUDIO jack (15 to 17)
RESET button (on the bottom) (29)
CHARGE lamp (41)
POWER/POWER SAVING lamp (23, 38)
POWER switch (23, 30)
PC-VIDEO switch (15 to 19, 31)
S VIDEO connector (19)
DC IN connector (20, 41)
Ventilation openings (46)
BATT RELEASE button (41)
BRIGHT control (32)
VOL control (32)
AUDIO/VIDEO connector (18, 19

Connecting the Glasstron

When connecting the Glasstron to other equipment, use the supplied cables.

Note

If you use the commercially available cables, and the performance is reduced, check the performance using the supplied cables.

Connecting the PC

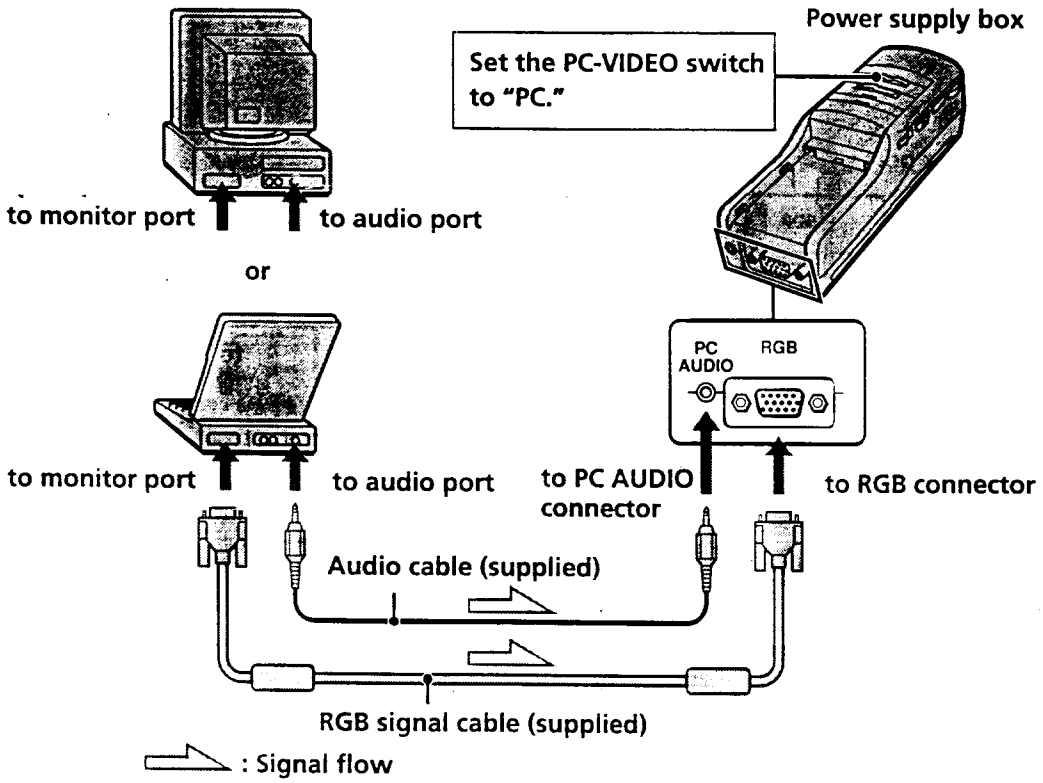
Be sure to turn off your PC before connecting the power supply box.

Notes

- Do not use the RGB signal cable (HD15), which is 6.5 feet (2m) or longer. The performance may be reduced.
- Refer to the instruction manual supplied with your PC as well.
- Depending on your computer, the audio port is indicated as LINE OUT, headphone, speaker, etc.
- Adjust sound volume on the computer.

Connecting other IBM compatible PCs

Connect the Glasstron to your PC using the supplied RGB signal (HD15) cable. When you connect the Glasstron to your PC, set the PC-VIDEO switch on the power supply box to "PC."

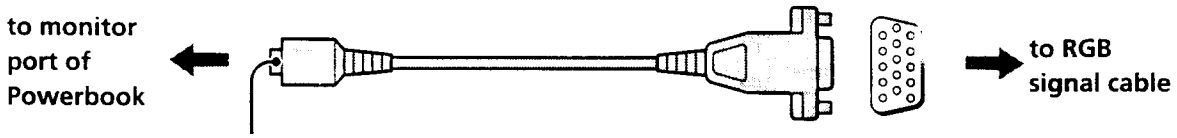


continued

Connecting the Glasstron (continued)

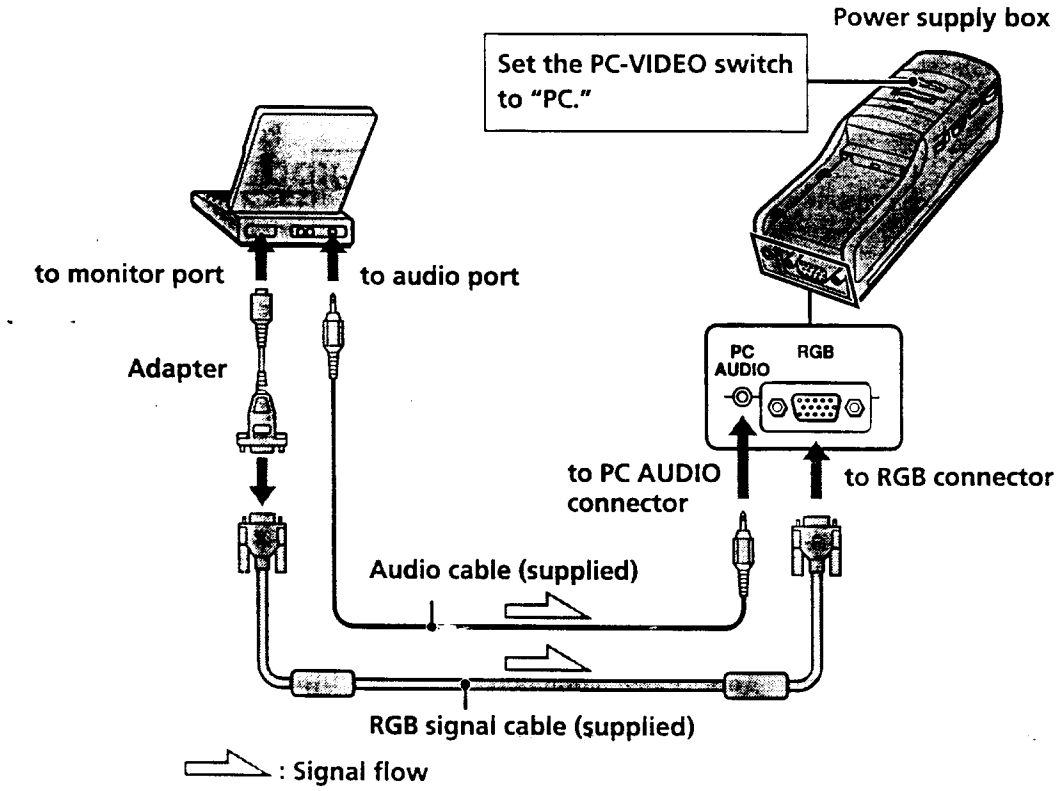
Connecting a Macintosh Powerbook

Depending on the model, you may need to use a commercially available adapt.) connect the RGB signal cable (supplied) as shown below. When you connect the Glasstron · our Powerbook, set the PC-VIDEO switch on the power supply box to "PC."



Connector should match the monitor port of your Powerbook model.

VGA type connector (HD15, female)

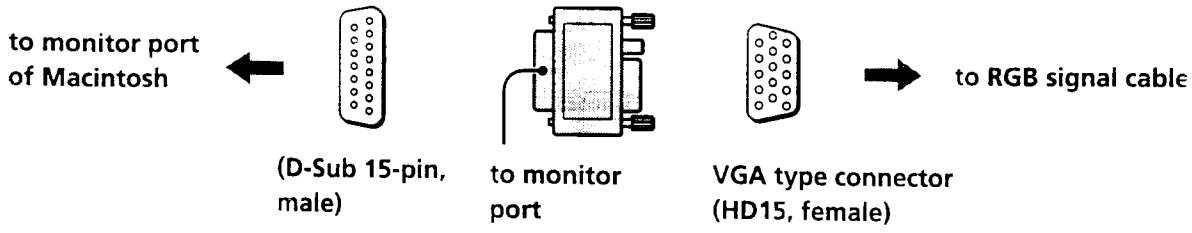


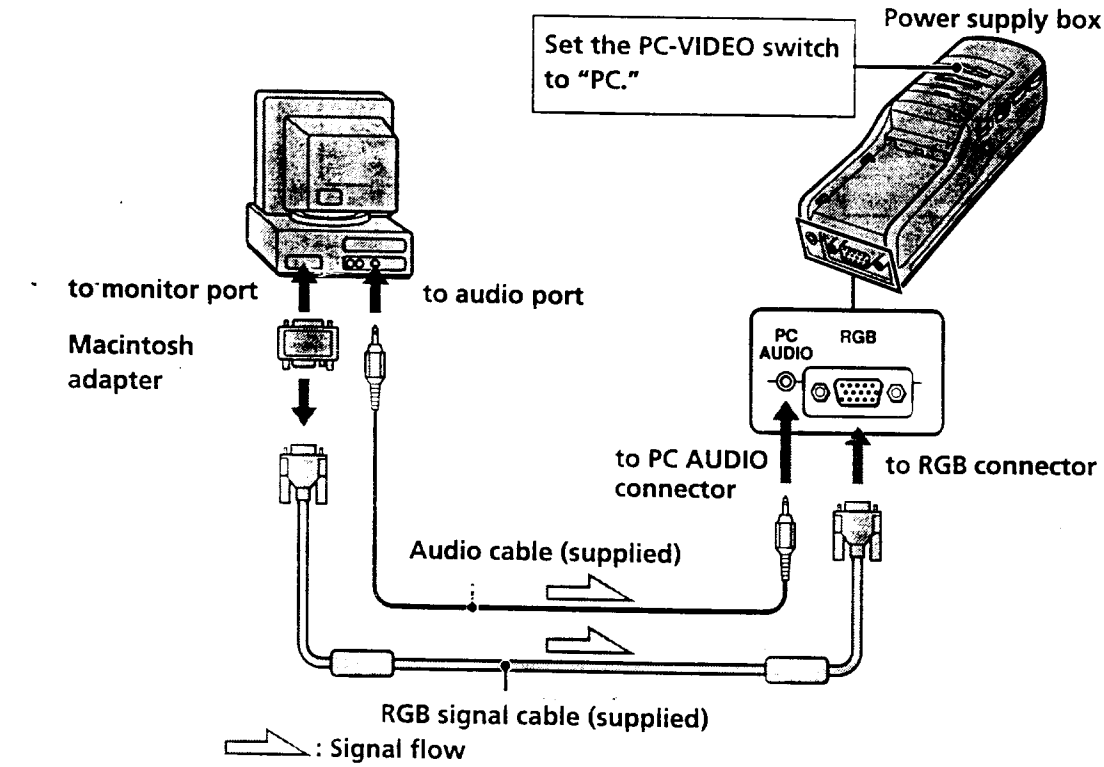
Note on connection

Set the display setting to the 16-inch display mode (832 × 624) or the 13-inch display mode (640 × 480). The Glasstron does not display the image with the 19-inch display mode (1024 × 768) or more.

Connecting a Macintosh (desktop models)

Depending on the model, you may need to use the supplied Macintosh adapter to connect the RGB signal cable (supplied) as shown below. When you connect the Glasstron to your Macintosh, set the PC-VIDEO switch on the power supply box to "PC."





Notes on connection

- The supplied display adapter does not support the models before the Macintosh II series.
- Set the display setting to the 16-inch display mode (832 × 624) or the 13-inch display mode (640 × 480). The Glasstron does not display the image with the 19-inch display mode (1024 × 768) or more.

continued

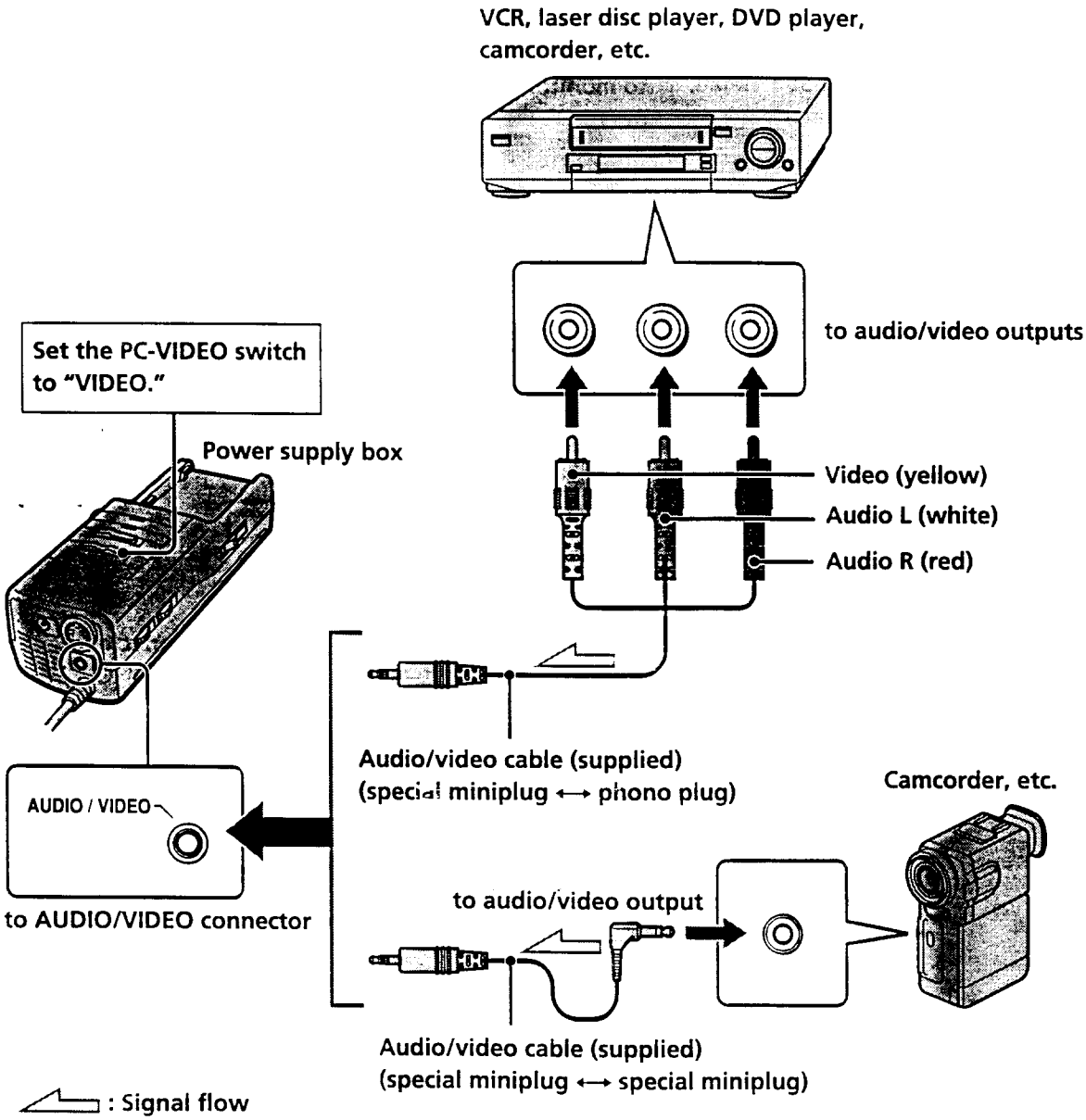
Connecting the Glasstron (continued)

Connecting the video equipment

Connect a VCR, laser disc player, DVD player, or camcorder to the power sup- box using one of the audio/video cables (supplied) as shown below. When you connect the sstron to the video equipment, set the PC-VIDEO switch on the power supply box to "VID ."

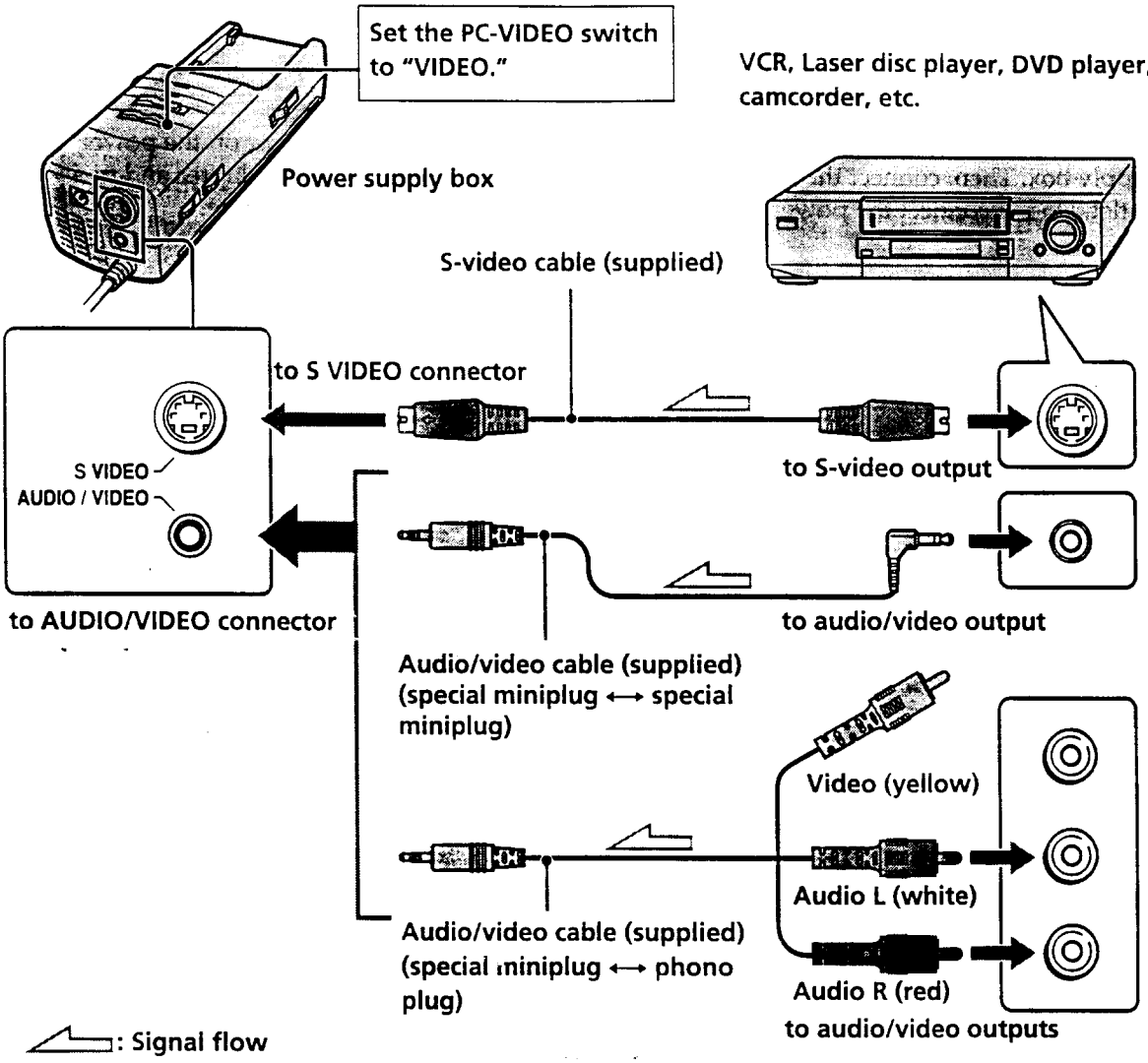
Note

Do not use the audio, audio/video or S-video connecting cables, which are 9.8 f (3m) or longer. The performance may be reduced.



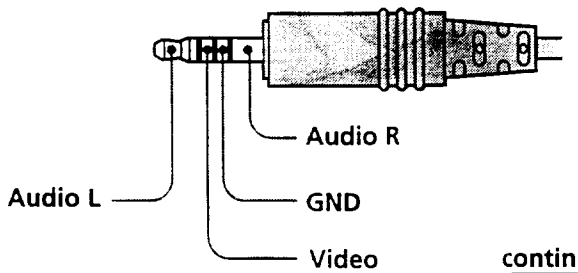
If your video equipment has an S-video jack

Connect the Glasstron to the video equipment using the supplied S-video cable and the audio/video cable to enjoy the highest quality pictures. In this case, you do not need to connect the video (yellow) plug. If you connect both the S-video and video plugs, the S-video signal is automatically selected. When you connect the Glasstron to the video equipment, set the PC-VIDEO switch on the power supply box to "VIDEO."


Set the PC-VIDEO switch to "VIDEO."
VCR, Laser disc player, DVD player, camcorder, etc.
Power supply box
S-video cable (supplied)
to S VIDEO connector
S VIDEO
AUDIO / VIDEO
to S-video output
to AUDIO/VIDEO connector
to audio/video output
Audio/video cable (supplied) (special miniplug ⟷ special miniplug)
Video (yellow)
Audio L (white)
Audio/video cable (supplied) (special miniplug ⟷ phono plug)
Audio R (red)
to audio/video outputs
: Signal flow

About the AUDIO/VIDEO input jack

The AUDIO/VIDEO input jack of the Glasstron is a special minijack, and the signal connections are aligned as shown on the right. This alignment may differ depending on the equipment.



continued

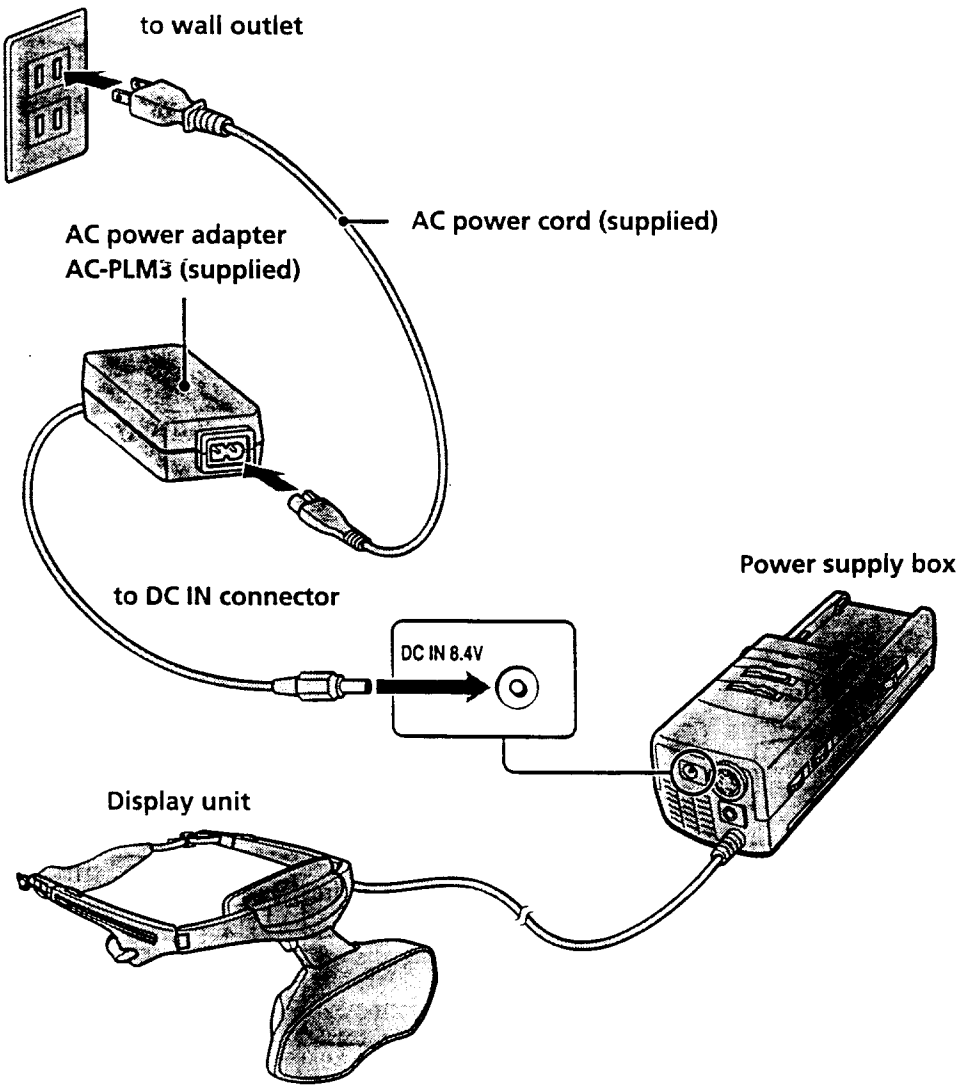
Connecting the Glasstron (continued)

Notes

- Even if you use the supplied audio/video cable, the audio and video signals may not be carried to the Glasstron depending on the video source. In this case, contact your Sony dealer or local authorized Sony service facility.
- When you connect the Glasstron to the audio output jacks (phono jacks) of your video equipment, connect the Glasstron to both the right and left audio output jacks. If you connect the Glasstron to just one audio output jack, you will hear sound from only one of the stereo earphones.

Connecting the power source

Connect the AC power adapter AC-PLM3 (supplied) to the DC IN connector on the power supply box. Then, connect the AC power cord (supplied) to the AC power adapter and to a wall outlet. Do not connect the power source until all other connections are complete.



Wearing the Glasstron

WARNING

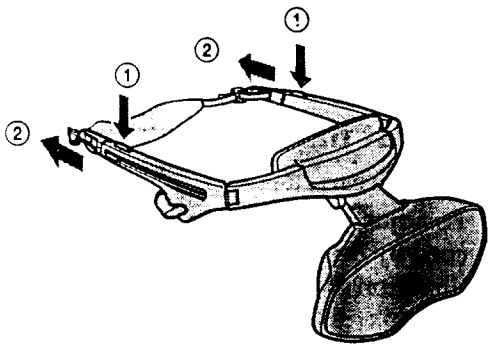
- Failure to properly fit the product (see "Proper Fit," page 9) each time may result in eye fatigue, eye damage, or loss of visual functions and may result in accident or injury.
- This product should not be used by children age 15 or younger.
  The eyes of children are still developing and may be adversely affected by use of this product, and it may cause eye fatigue, eye damage, or loss of visual functions.
  In addition, this product may not be adjusted to fit a child's head.

If you normally wear glasses while watching TV, you can use the Glasstron while wearing glasses.

1 Loosen the back strap.

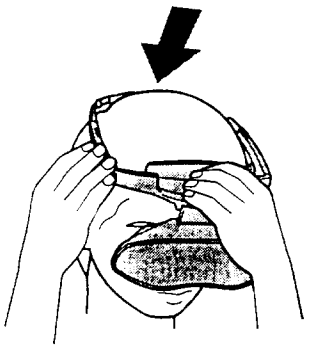
① Press and hold the strap release buttons.

② Then, loosen the back strap in the direction of the arrows.



2 Put on the Glasstron.

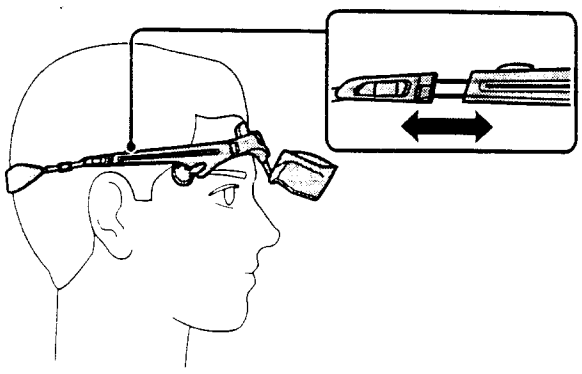
Hold the front pad against your forehead and place the rear strap so it is fixed firmly around the back of your head.



3 Adjust the strap.

Adjust the strap after putting on the Glasstron.

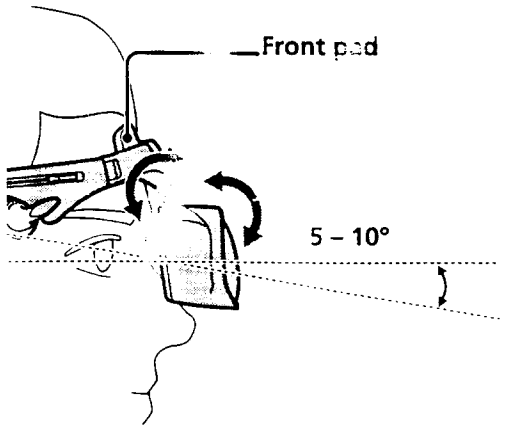
Make sure the strap is snug but comfortable.



continued

4 Adjust the angle of the display unit.

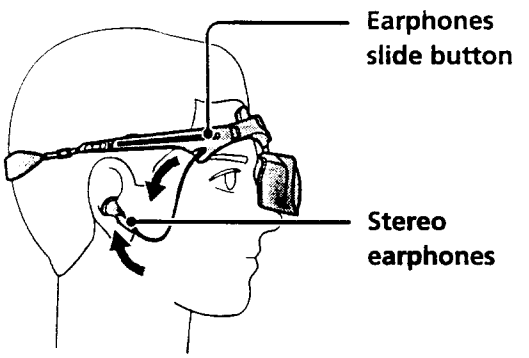
While holding the front pad against your forehead, adjust the angle of the display unit using the two hinges. Move the display unit close to your eyes at a slight downward angle. If you wear glasses, move the display unit as close to the lenses as possible.



5 Adjust the stereo earphones.

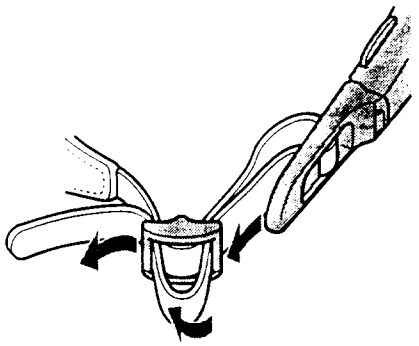
Pull the earphones out.

To adjust the slack, reel in the earphone cord by pressing the slide button in the direction of the arrow.



Adjusting the back strap

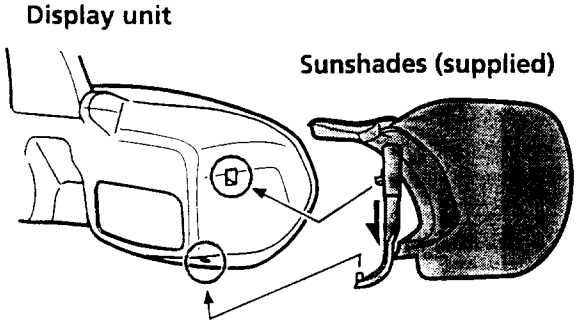
If the strap does not fit properly in step 3, adjust the strap by changing the belt length.



Attaching the sunshades

You can attach the supplied sunshades if you like. The sunshades prevent the LCD screen from reflecting light that may interfere with the picture.

Attach the sunshades on the right and left sides of the display unit. Pull out the tab of the sun shade, then insert the tabs into the holes on the display unit as shown below.



Turning on the Glasstron

After you complete all of the connections and put on the Glasstron properly, turn on both the Glasstron and the connected equipment, and follow the procedures below.

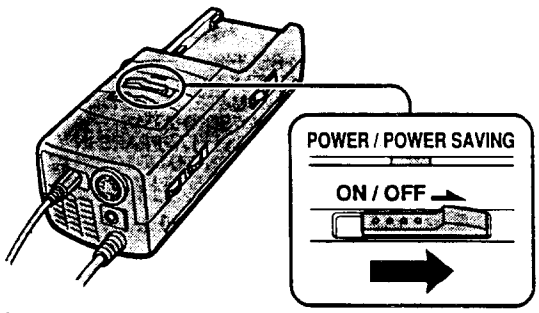
① Checking the display unit position → This page
② Checking the screen position alignment → Page 25
③ Setting a password → Page 28
If you do not want to use a password, you have to set the Glasstron to operate without using a password in "Setting the password."

Checking the display unit position

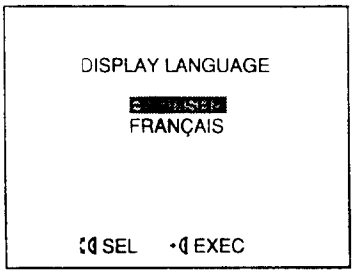
Every time you turn on the Glasstron, the adjustment screen appears to help you adjust the display unit properly. Adjust the display unit following the procedure below.

1 Turn on the Glasstron sliding the POWER switch.

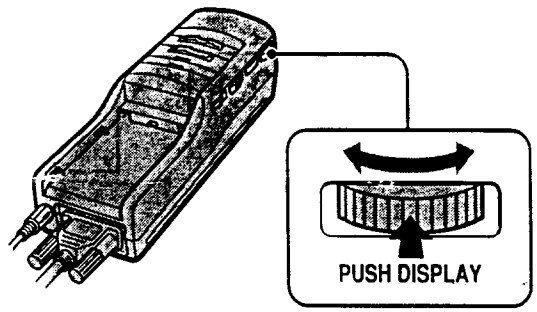
The POWER/POWER SAVING lamp lights up green.

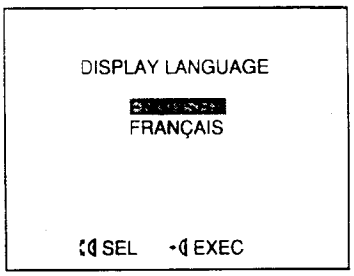


Screen

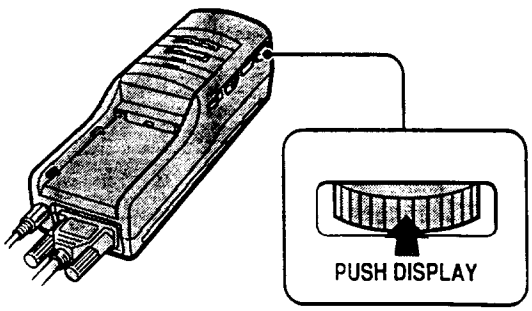


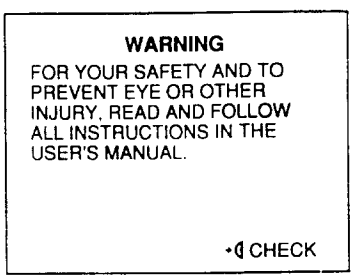
2 Turn the PUSH DISPLAY jog dial to select the desired language, then press the jog dial.





3 Read the WARNING and press the jog dial.

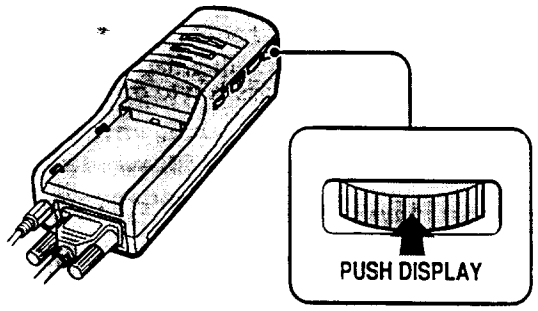




continued

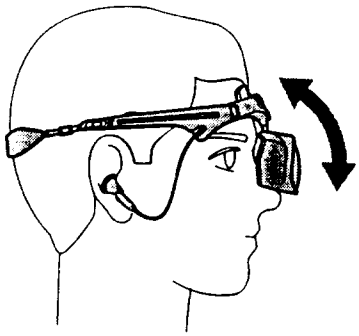
Turning on the Glasstron (continued)

4 Read the next WARNING and press the jog dial.



WARNING
THIS PRODUCT SHOU... NOT BE USED BY CHILDRE... AGE 15 OR YOUNGER.
SEE THE USER'S MA...UAL FOR DETAILS.
•◖ CHECK

5 Adjust the display unit so that you can see an asterisk (*) in each of the four corners as shown below.

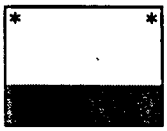


Correct

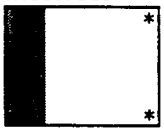
WARNING
TO CONFIRM SAFE FIT AND PREVENT EYE FATIGUE OR EYE DAMAGE, ADJUST THE DISPLAY SO THAT AN ASTERISK (*) APPEARS IN EACH CORNER.
SEE THE USER'S MANUAL FOR DETAILS.
•◖ CHECK

Incorrect

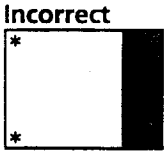
Incorrect



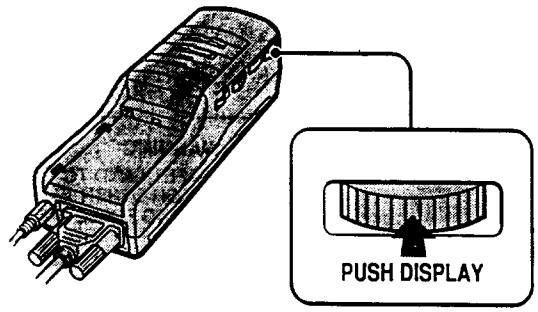
Incorrect



Incorrect



6 After you complete the display unit adjustment, press the jog dial.



7 Read the next WARNING, then go to "Checking the screen position alignment."

WARNING
TO PREVENT EYE DAMAGE,
DO NOT USE THIS PRODUCT
IF THE VERTICAL LINES
DO NOT CROSS THE
HORIZONTAL LINE ON THE
NEXT SCREEN.
SEE THE USER'S MANUAL
FOR DETAILS.

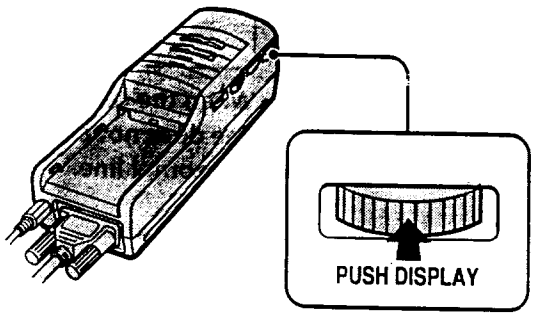
•◖ CHECK

Checking the screen position alignment

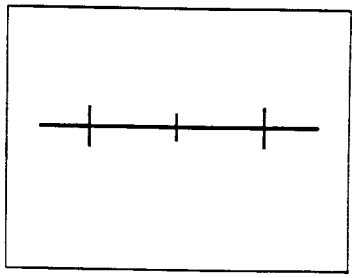
WARNING
Each time this product is used, adjustment screens will appear, requiring the viewer to properly fit the product. Proper fit means that an asterisk (*) will appear in each corner of the display. To prevent eye damage, do not use this product if the vertical lines do not cross the horizontal line on the next screen.

The Glasstron includes two small (left and right) LCDs. You are watching a combined picture created from these two screens. Although the screen position is properly aligned at the factory, it may become misaligned if the Glasstron is deformed or damaged. Check the screen position alignment every time you turn on the Glasstron. If you cannot have correct screen alignment, stop using the Glasstron immediately.

1 Press the PUSH DISPLAY jog dial.



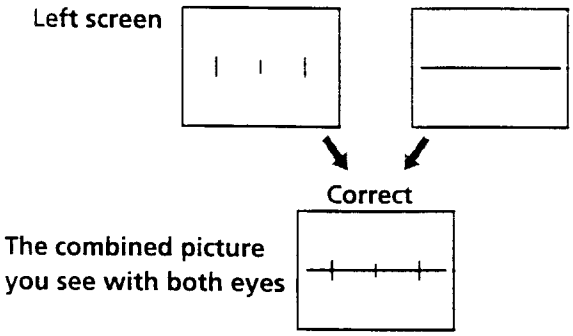
Screen



continued

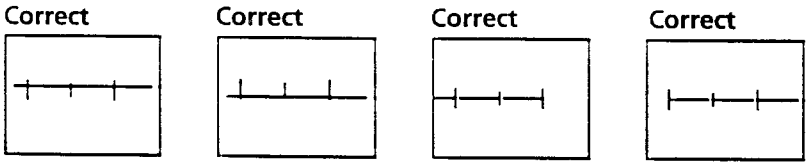
Turning on the Glasstron (continued)

2 **If the screens are aligned, press the jog dial.**

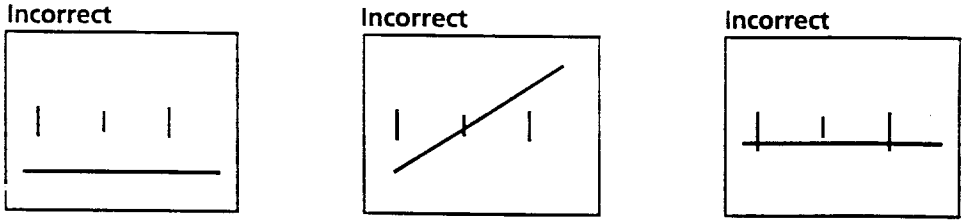


You may see a horizontal line on the left screen rather than the right screen, and vertical lines on the right screen rather than the left screen. This is not a malfunction.

If the image you see matches one of the pictures below, you have correct screen alignment.



If the image you see matches one of the pictures below, stop using the Glasstron immediately. Use of the Glasstron under such conditions may cause eye fatigue or eye damage.



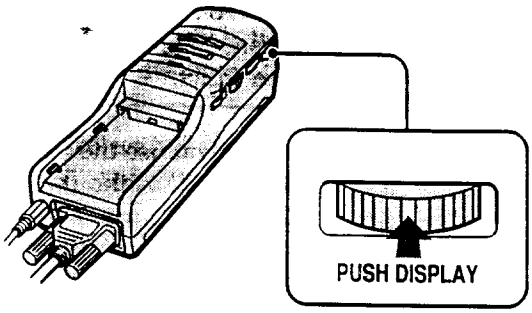
When no vertical lines cross the horizontal line.

When the horizontal line appears as a diagonal line.

When the center vertical line does not cross the horizontal line.

If you cannot see a proper arrangement of these lines even after resting your eyes for a few hours, the Glasstron may not be operating correctly. Contact your Sony dealer or local authorized Sony service facility.

3 Read the WARNING and press the jog dial.



The password "YES or NO" screen appears.

WARNING

MISUSE OR OVERUSE OF THE PRODUCT MAY RESULT IN EYE FATIGUE OR EYE DAMAGE. STOP USING IF YOU FEEL TIRED OR EXPERIENCE HEADACHES OR DISCOMFORT. SEE THE USER'S MANUAL FOR DETAILS.

•◖ CHECK

DO YOU WISH TO SET A THREE NUMBER PASSWORD?

YES
NO

SEE THE USER'S MANUAL FOR DETAILS.

◖ SEL •◖ EXEC

Go to "Setting the password" on page 28.

Setting the password

WARNING

This product should not be used by children age 15 or younger. The eyes of children are still developing and may be adversely affected by use of this product. To prevent such use, this product has been equipped with a safety password protection system. Please use a secure password if children age 15 or younger may have access to this product.

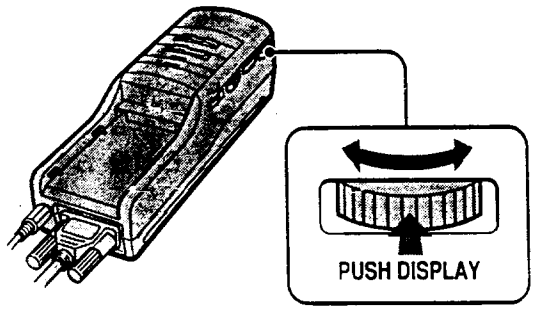
Once you set a password, you have to input the password every time you use the Glasstron. D not forget your password. If you like, you can set the Glasstron to operate without a passwor

Before you start...

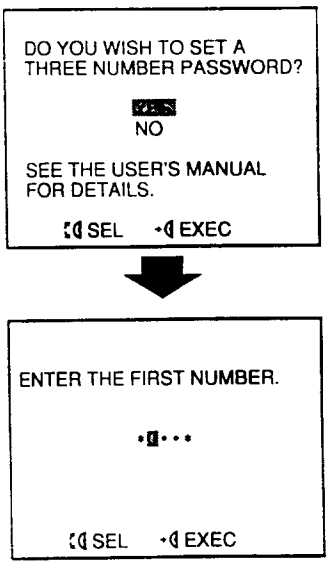
Follow the procedure in "Turning on the Glasstron" (pages 23 through 27). The password "YE or NO" screen appears on the screen.

1 Select whether to set a password or not using the PUSH DISPLAY jog dial.

If you need to set a password, select YES. If not, select NO by turning the jog dial. Then press the jog dial. If you do not need to set a password, go to step 4 in "Using the Glasstron" (page 30).

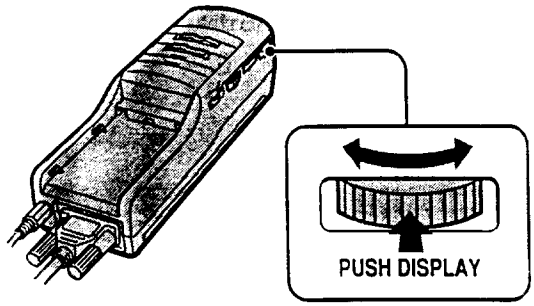


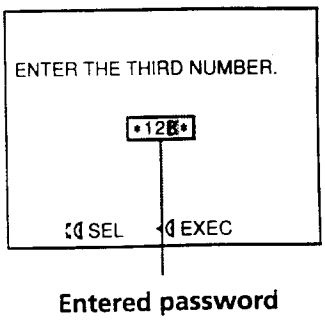
Screen



2 Enter a three digit password number, one by one, by using the j dial.

Turn the jog dial to enter the first number, then press the jog dial. Enter the second and third numbers in the same way.



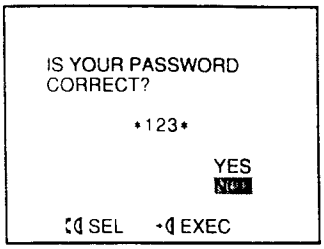


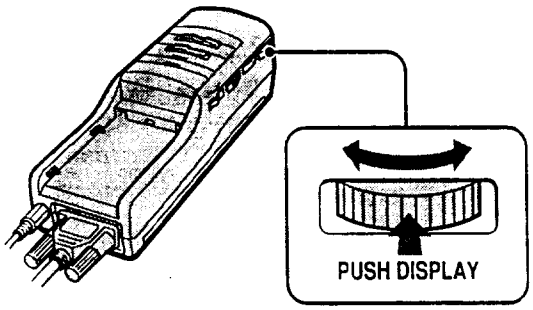
3 Verify a password using the jog dial.

If the password is correct, select YES by turning the jog dial. If not, select NO. Then press the jog dial.

If you select NO, return to step 1.

If you select YES, go to step 4 in "Using the Glasstron" (page 31).



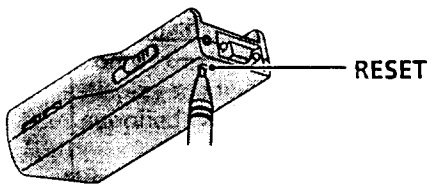


Changing the password

When the power is on, press RESET on the bottom of the power supply box with a pointed object such as a ballpoint pen.

- If you have already read the WARNING messages (page 23 through 27) (e.g., while watching a video picture), the display will return to step 1 in "Setting the password" (page 28).
- Before you read the WARNING message (e.g., you have forgotten your password), the display will return to step 3 in "Turning on the Glasstron" (page 23).

If you need to set a password after having set the Glasstron to operate without a password, follow the same procedure above.



Note

Pressing the RESET button does not affect picture or sound adjustments in PC and video mode.

Using the Glasstron

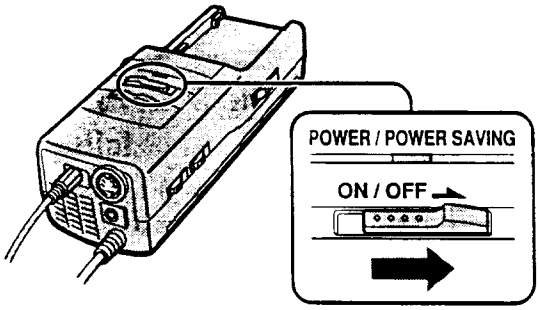
You need to set a password the first time you use the Glasstron or after you reset the Glasstron. Set the password following the procedure in "Setting the password" (pages 28 and 29).

Before you start...

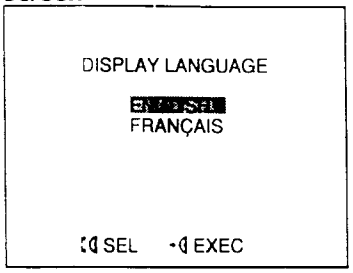
Be sure to follow the procedures in "Connecting the Glasstron" (pages 15 to 20) and "Wearing the Glasstron" (page 21).

1 Turn on the Glasstron using the POWER switch, then press PUSH DISPLAY jog dial.

Change the display language before pressing the jog dial, if necessary.

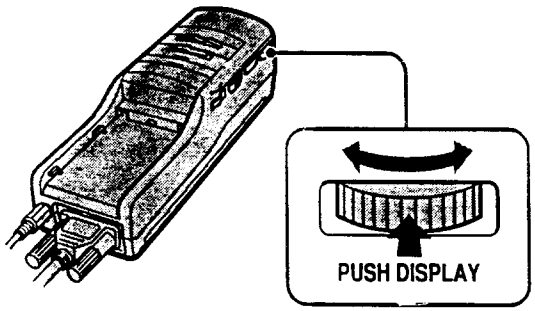


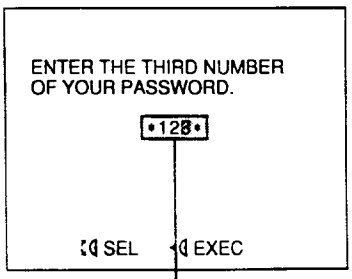
Screen



If you have set the Glasstron to operate without a password, go to step 3.

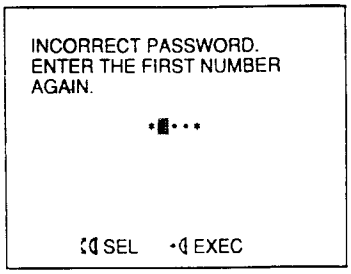
2 Turn the PUSH DISPLAY jog dial to enter the first number of your password, then press the jog dial. Enter the second and third numbers in the same way.



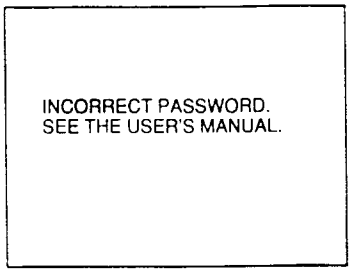


Entered password

If you enter a wrong password, the message shown on the right appears. Enter the correct password.



If you have entered a wrong password more than five times, after about ten seconds, the Glasstron turns off automatically.



3 Follow the instructions on the screen.

① Warning message → Follow steps 3 through 7 in "Checking the display unit position" (pages 23 through 25).

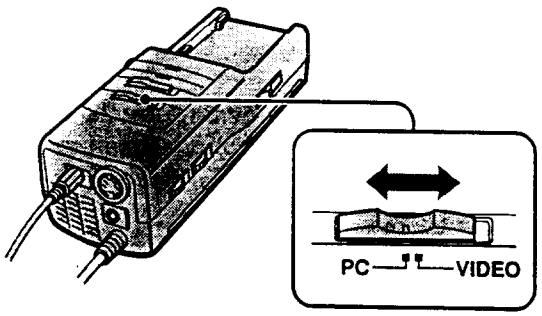
- After carefully reading the warnings and checking the display unit position, press the jog dial.

② Screen alignment → Follow steps 1 through 3 in "Checking the screen position alignment" (pages 25 through 27).

- Read the warning carefully, and press the jog dial.
- Make sure the left and right screens are aligned, and press the jog dial.

4 Select the input signal using the PC-VIDEO switch.

Select PC (RGB signal) or VIDEO (video signal) depending on the connected equipment.



When you select PC (PC mode)

PC / RGB

When you select VIDEO (Video mode)

VIDEO

When you connect to the S-video connector

"S VIDEO" appears on the screen.

5 Input the signal from the connected equipment.

When you connect the PC:

Adjust the screen resolution. For details, see "Signal compatibility" on page 35.

When you display VGA pictures (640 × 480), the picture appears about 60% of the entire screen.

Notes

- If no picture appears, check the default setting of your PC to output the external RGB signal from the monitor connector.
- Some PCs do not output external display signal when they turn on, or switch to external display mode. Change the display mode of your PC, referring to the instruction manual supplied with your PC.

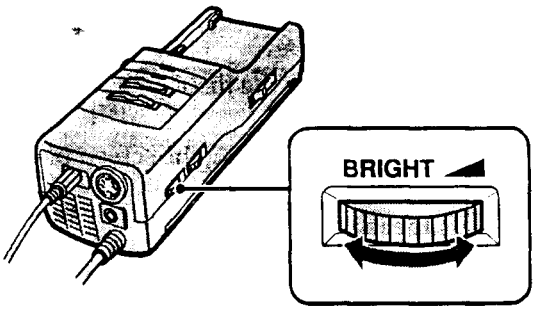
When you connect the video equipment:

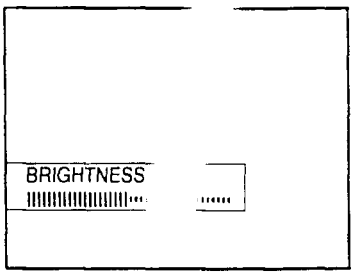
Start playback on the video equipment connected to the Glasstron.

When you display NTSC video picture, the picture appears about 60% of the entire screen.

continued

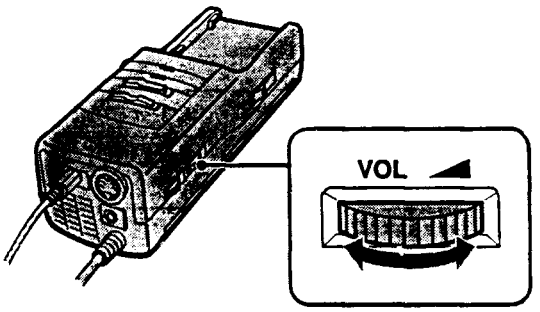
6 Adjust the brightness by turning the BRIGHT contr





7 Adjust the sound volume by turning the VOL control.

When you set AVLS in the menu to on, you cannot turn up the volume beyond the defir limit (see page 38). If the audio input level is too high, the sound may be distorted. Turn the volume down using the VOL control.



After you finish using the Glasstron

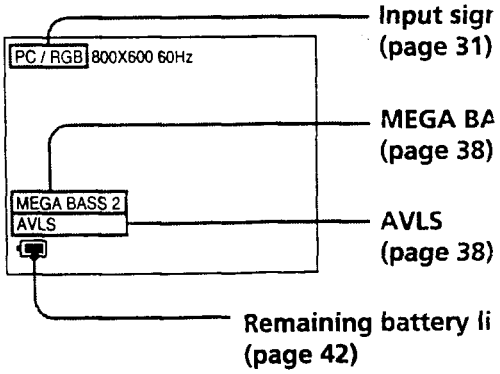
Take off the Glasstron, and turn off the power.

Note on the LCDs

The LCD screen is made with high-precision technology. However, black points or bright points of light (red, blue, or green) may appear constantly on the LCD screen. This is not malfunction.
(Effective dots: more than 99.999%)

Checking the display indication

Press the jog dial while the picture is displayed. The display indication appea on the screen for five seconds.
To turn off the indication sooner, press tl jog dial again.

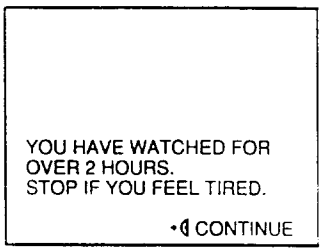


* When using the AC power adapter, the " " mark appears on the screen.

Screen warnings against overuse of the Glasstron

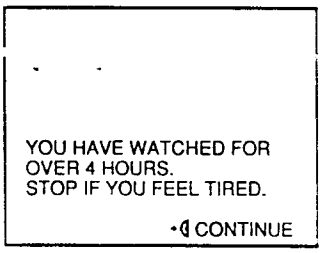
To prevent eye fatigue or eye damage, after you use the Glasstron for a fixed length of time, the following caution appears on the screen.

After about 2 hours and 15 minutes of use



Stop using the Glasstron if you feel tired or you experience headaches or discomfort. If you want to continue using the Glasstron, press the jog dial.

After about 4 hours and 15 minutes of use

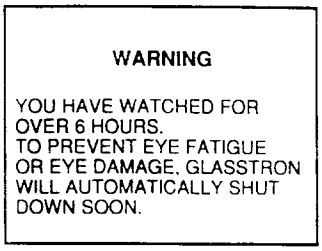


Stop using the Glasstron if you feel tired or you experience headaches or discomfort. If you want to continue using the Glasstron, press the jog dial.

Note

If you do not press the jog dial when the cautions above appear on the screen, the Glasstron turns off automatically in both cases.

After about 6 hours of use



The power turns off automatically.

Caution: Motion sickness from viewing programmes.

Some viewers may experience motion sickness, headache, or nausea from viewing movies or video programmes, especially those with intense action and movement. If you feel any of these symptoms, stop using the product immediately. To avoid personal injury or injury to others, do not drive a car or motorcycle, nor do anything that requires concentration until the symptoms disappear.

Caution: Motion sickness from external motion.

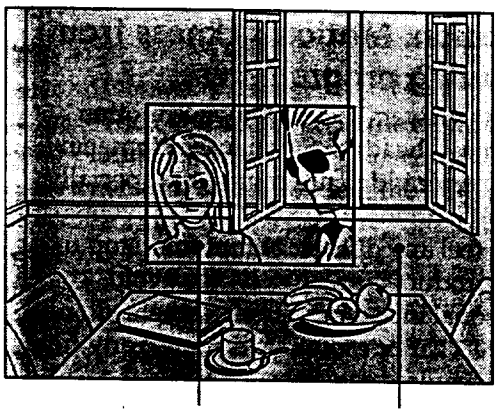
Do not use the product while subject to external motion — for example, as a passenger in a car. Use of this product under these conditions may cause motion sickness.

Viewing the surrounding environment

While you are wearing the Glasstron, you can view the surrounding env ›nment through the screen in two ways:

Viewing the surrounding environment by adjusting the transparency of the entire screen (See-through mode)

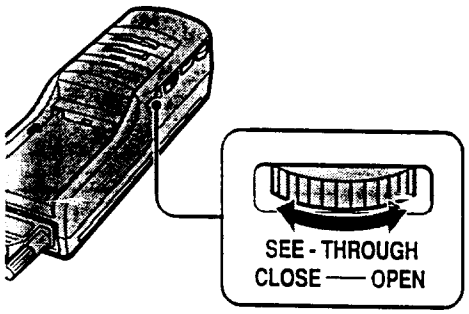
You can adjust the level of transparency of the entire screen with the LCD shutter dial.



The picture becomes transparent.

The area surrounding the picture also becomes transparent.

Turn the SEE-THROUGH dial.

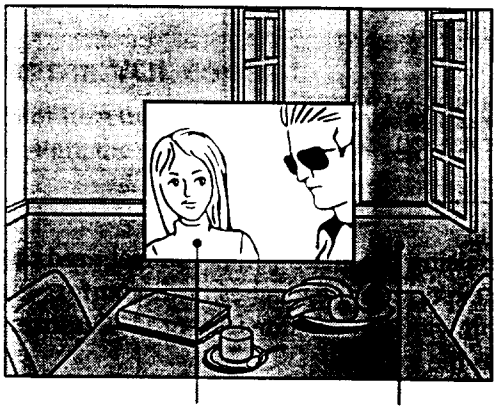


Note

If there is a bright light near the display unit, you may not be able to completely black out the surrounding environment by adjusting the SEE-THROUGH dial.

Viewing the surrounding environment in the area around the picture only (Screen mode)

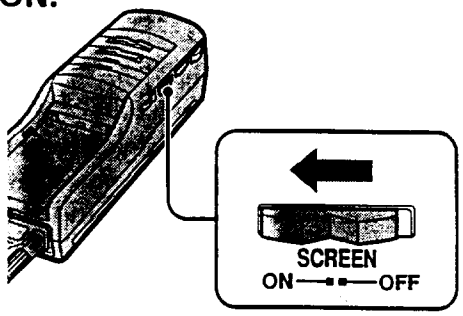
You can adjust the level of transparency of the screen area around the picture only. The picture remains intact.



The picture remains intact.

The area surrounding the picture also becomes transparent.

Set the SCREEN switch to ON.



In this mode, the screen does not become transparent even if you turn the SEE-THROUGH dial.

Notes

- When you set the SCREEN switch to ON, the edges of the picture may fade a bit, but this is not a malfunction.
- If there is a bright light near the display unit, you may not be able to completely black out the surrounding environment arround the picture by adjusting the SEE-THROUGH dial when you set the SCREEN switch to on.

Adjusting the sound and picture

Signal compatibility

The signal specifications that this unit supports are as follows:

PC mode (RGB signal)

Display mode	Screen resolution (dot × line)	Horizontal frequency (kHz)	Vertical frequency (Hz)
Macintosh			
13" color	640 × 480	35.0	67
16" color	832 × 624	49.7	75
IBM PC compatibles			
VGA text	640 × 400	31.5	70
VGA graphics	640 × 480	31.5	60
VESA VGA	640 × 480	37.9	72
	640 × 480	37.5	75
	640 × 480	43.3	85
VESA SVGA	800 × 600	35.2	56
	800 × 600	37.9	60
	800 × 600	48.1	72
	800 × 600	46.9	75
	800 × 600	53.7	85

Video mode (video signal)

NTSC color system	Displayed in 640 × 480 area

Notes on the PC mode

- This unit does not support XGA mode (1,024 × 768) and above. If you set the vertical frequency to 60 Hz in XGA mode, the picture is displayed but the picture quality is poor due to the signal loss. Change the screen resolution on your PC to SVGA or VGA.
- Though the Glasstron supports the signals listed above, set the vertical frequency to 60 Hz when using with SVGA (800 × 600), or to 72 Hz or 75 Hz with VGA (640 × 480) mode. Also adjust the vertical frequency of the external display output signal of the connected computer.
- When you display VGA pictures (640 × 480) or NTSC video pictures (video mode), the pictures are not displayed across the entire screen. About 60% area of the screen is utilized when VGA pictures appear, or about 60% area is utilized when NTSC video pictures appear.
- Some notebook type PCs do not output the RGB signal in the adjusted screen resolution and the vertical frequency from the external monitor port until you set the PC to external display mode.
- When you use Microsoft Windows 95 or Windows 98, install the information file included in the supplied Windows 95/Windows 98 PC Glasstron Information Disk. For details on how to install the information file, refer to the Installation Guide "Windows 95/Windows 98 PC Glasstron Information Disk/screen adjustment disk for Macintosh."

continued

Adjusting the sound/picture

You can adjust the following items using the menu display.
The menu is displayed only in English.

PC mode (RGB signal)	Video mode (video sign
AVLS (Auto Volume Limiter System): Keeps the maximum volume down to protect your ear. You cannot tur p the volume beyond the defined limit even if you try to turn the VOL control.	
MEGA BASS: Creates a deep, powerful sound by emphasizing the bass sound.	
POWER SAVE: The POWER SAVING SENSOR detects the removal of the Glasstron from your head. The uni enters standby mode in a few seconds, automatically stopping the sound and picture in order to save the battery power. The sound and picture resume in a few seconds when you put on the Glasstron again.	
V CENT: Adjusts the vertical position of the picture.	**CONTRAST:** Adjusts the picture contrast.
H CENT: Adjusts the horizontal position of the picture.	**HUE:** Adjusts the hue, if the picture looks too red or green.
TRACKING: Adjusts the tracking of the picture (e.g., if the picture is not displayed clearly).	**COLOR:** Adjusts the color intensity.
SYNC: Adjusts the picture with the RGB signal synchronization (e.g., if the picture is blurred, or if red or blue shadows appear in the picture). Perform this adjustment after TRACKING adjustment is finished.	

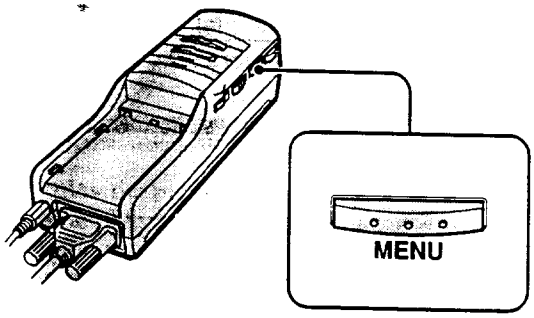
Notes on power saving function

- The power saving function may not work correctly in the following cases:
  - your hair is between your forehead and the POWER SAVING SENSOR.
  - the space or angle between your forehead and the POWER SAVING SENSOR is not correct.

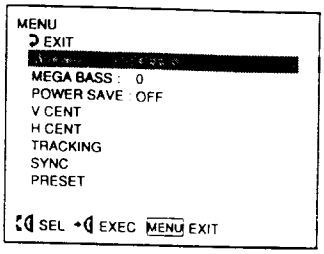
  In these cases, set POWER SAVE to OFF.
- When the picture disappears immediately, do the following procedures:
  1. Turn off the power sliding the POWER switch.
  2. Turn on the power again.
  3. After checking the screen position (pages 23 to 27), press MENU to display the menu options.
  4. Set POWER SAVE to OFF.

1 Press MENU.

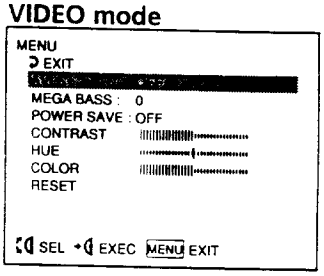
The menu display appears on the screen.



PC mode

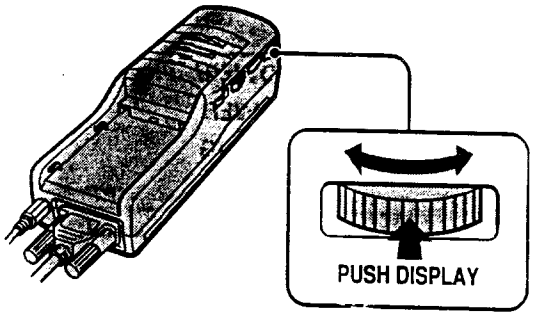


VIDEO mode



2 Turn the PUSH DISPLAY jog dial to select the desired item, then press the jog dial.

The setting screen of the selected item appears.



3 Adjust the setting using the jog dial.

For details on each item, see pages 38 to 40.

To set other items, repeat steps 2 and 3.

4 Press MENU.

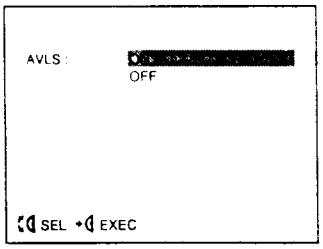
The menu display goes off.

You can also turn off the menu display by selecting EXIT in the menu using the jog dial.

continued

AVLS (Auto Volume Limiter System)

Turn the jog dial to set to ON, then press the jog dial.

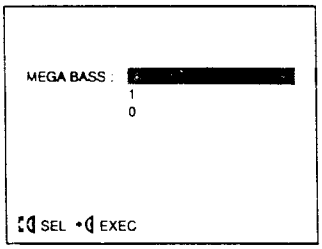


When AVLS is on, the volume does not become louder than the level you set even if you turn the VOL control.

MEGA BASS

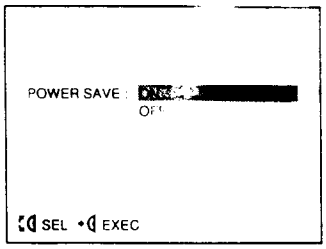
Turn the jog dial to select the desired value, then press the jog dial.

2: Maximize the bass sound.
1: Boost the bass sound.
0: Normal bass sound.



POWER SAVE

Turn the jog dial to set to ON, then press the jog dial.



When you take off the display unit while the POWER SAVE is set to ON, the POWER SAVING SENSOR (page 14) is activated and automatically turns off the picture and sound. The picture and sound resumes a few seconds after putting the display unit back on.

When POWER SAVE is set to ON, you can monitor the status of the Glasstron by checking the POWER/ POWER SAVING indicator.

Status	POWER/ POWER SAVING indicator	Picture	Power consumption
Normal	Lit in green	Normal	100%
Power save mode	Lit in orange	No picture	5%

Note

The power saving function of the Glasstron does not work together with the power management function of your PC.

Adjusting the RGB signal

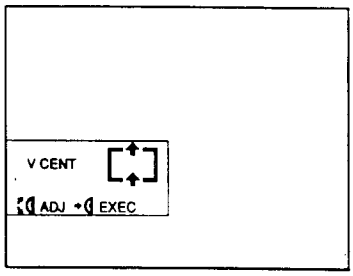
It is recommended to adjust the picture after installing the information file included in the supplied Windows 95/Windows 98 PC Glasstron Information disk, or the screen adjustment disk for Macintosh. For details on how to install the information file, refer to the instruction manual "Windows 95/Windows 98 PC Glasstron Information Disk/screen adjustment disk for Macintosh".

Note

When you display the picture on both the LCD display of the notebook PC and on the Glasstron, you cannot adjust the picture on the Glasstron because of the mismatch of the output signal frequencies with some notebook PCs. In this case, change the display mode on your PC to the external monitor only. Then, change the screen resolution according to the list on "Signal compatibility" (page 35).

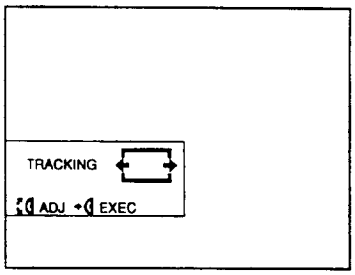
V CENT

Turn the jog dial to adjust the center of the picture, then press the jog dial.



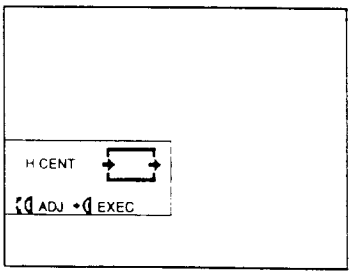
TRACKING

Turn the jog dial until the stripes on the picture disappear, then press the jog dial.



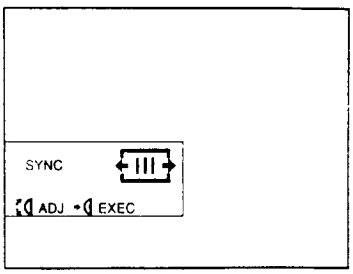
H CENT

Turn the jog dial to adjust the center of the picture, then press the jog dial.



SYNC

Turn the jog dial to adjust the clearance of the picture then press the jog dial.

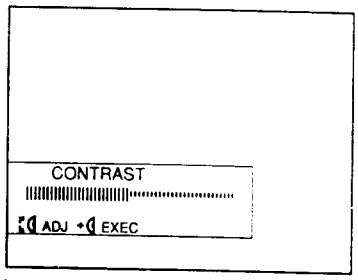


continue

Adjusting the video signal

CONTRAST

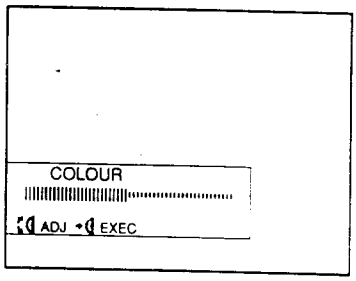
Turn the jog dial to adjust the contrast, then press the jog dial.



less ⟷ more

COLOR

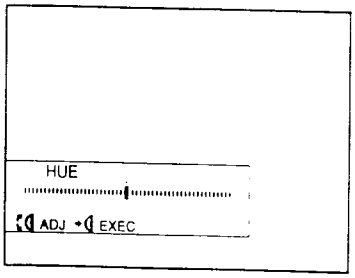
Turn the jog dial to adjust the color intensity, then press the jog dial.



less ⟷ more

HUE

Turn the jog dial to adjust the hue, then press the jog dial.



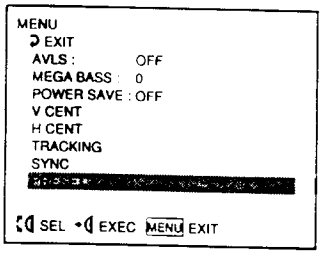
reddish ⟷ greenish

Resetting the adjustment to the factory preset level

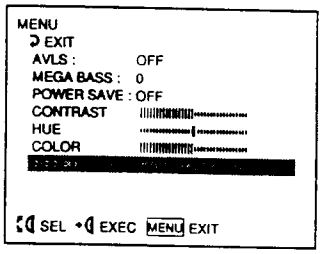
AVLS, MEGA BASS, POWER SAVE settings are not reset to the factory preset level.

Turn the jog dial to select RESET in the menu, then press the jog dial.

PC mode



VIDEO mode



Note

The settings are retained even when you turn off the power.

Using the optional battery pack

If you use a battery pack such as the NP-F550/F750/F950, you can use the Glasstron without connecting to a wall outlet.

Note

You cannot use the Glasstron with the alkaline batteries. Use the AC power adapter (supplied) or the battery pack (not supplied)

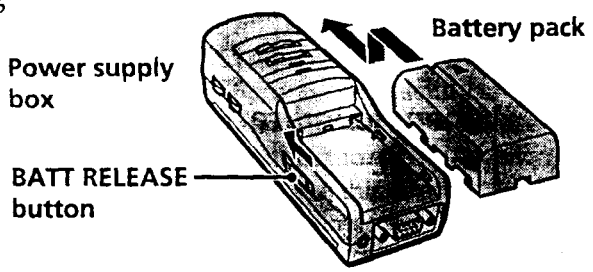
Charging the battery pack

Charge the battery pack before use. You can charge the battery pack using the power supply box. If you attach the battery pack as described below, the battery pack charges while you are not using the Glasstron.

1 Attach the battery pack to the power supply box.

Install the battery pack properly making sure it is not crooked against the power supply box.

To remove the battery pack, while sliding BATT RELEASE, pull out the battery pack.

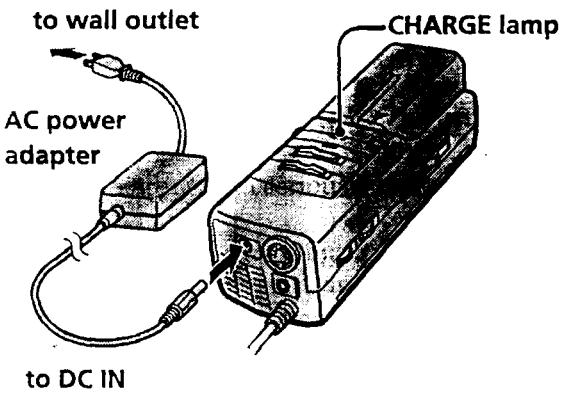


2 Connect the AC power adapter to the DC IN connector on the power supply box. Then, connect the AC power cord to the AC power adapter and to a wall outlet.

Charge the battery pack on a flat place without vibration.

The CHARGE lamp lights up. When the battery pack is fully charged, the CHARGE lamp goes out.

Battery life and charging time are shown in the table on the next page.



Notes

- If the POWER/POWER SAVING lamp flashes while using the battery pack, charge the battery pack.
- If the CHARGE lamp flashes, the power supply box or battery pack is malfunctioning. Contact your Sony dealer or local authorized Sony service facility.
- Use the supplied AC power adapter only when charging a battery pack.
- Battery life may be shorter in a cold environment. This is a typical battery characteristic.
- You cannot charge the battery pack in power save mode. Turn off the Glasstron, then it starts charging the battery pack.

continued

Using the optional battery pack (continued)

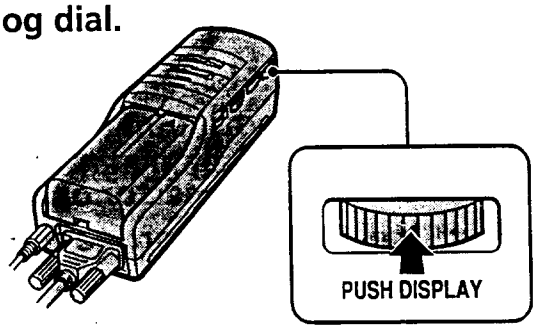
Battery pack	Charging time	Battery life (fully charged battery, PC mode)
NP-F550	Approx. 4 hours	Approx. 1 hour
NP-F750	Approx. 8 hours	Approx. 2 hours
NP-F950	Approx. 12 hours	Approx. 3 hours

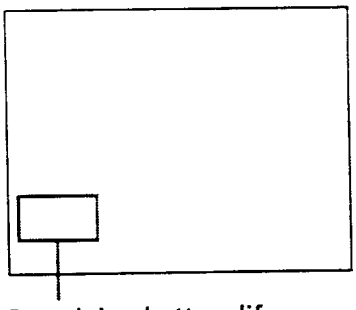
- The battery life and charging time may change depending on the conditions of use.
- You can also use a battery pack such as the NP-500/510/710/F530/F730/F930 (not supplied) with the Glasstron.
- You can use an InfoLITHIUM™ battery pack with the Glasstron. When using such a battery pack, the estimated remaining battery life is displayed not with the time counter, but with the indicator.
- The battery life listed above is for PC mode. When you use the Glasstron in video mode, the battery life is reduced to 80% of the PC mode.

"InfoLITHIUM" is a trademark of Sony Corporation.

Checking the remaining battery life

When no indication or caution appears on the screen, press the jog dial.

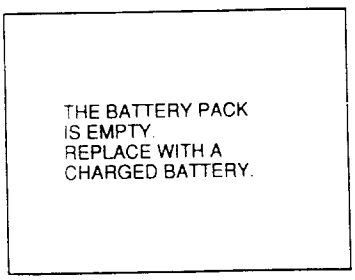




Remaining battery life

Fully charged ← → dead

When the battery pack is weak, the following message appears on the screen. Replace the battery pack with a charged one.



When using the AC power adapter, the "🔌" mark appears on the screen.

Precautions

Use

- Operate the product only with the supplied AC power adapter. If you use a different AC power adapter, it may cause a malfunction.

Unified polarity plug

- Should any liquid or solid object fall into the cabinet, unplug the product and have it checked by qualified personnel before operating it further.
- Always turn the product off when you do not use it.
  Unplug the product from the wall outlet if you are not going to use it for several days or more. To disconnect the cord, pull it out by the plug. Never pull the cord itself.
- Do not overload wall outlet, extension cords, or convenience receptacles beyond their capacity, since this can result in fire or electric shock.
- Do not use attachments not recommended by the manufacturer, as they may cause hazards.
- Avoid using earphones at high volume. Hearing experts advise against continuous, loud, and extended play. If you experience a ringing in your ears, reduce volume or discontinue use.
- Do not touch the AC power adapter or power supply box with wet hands. If you fail to observe this, it may cause electric shock.
- Do not drop or give a mechanical shock to the product.

Installation

- To prevent internal heat build-up, do no block the ventilation openings.
- Avoid operating the product at temperatures below 41°F (5°C).
- Do not subject the product to high temperature or direct sunlight. If you d not observe the above instructions, the product may become deformed and the screens may become impossible to align. If you keep watching misaligned screen you may develop eye fatigue. Follow th instructions in "Checking the screen position alignment" on page 25, to be sure the screens are aligned. If you find the screens misaligned, have the produc repaired at your Sony dealer or local authorized Sony service facility.
- Do not place the product in locations where it is wet, humid, dusty, smoky, or steamy. Do not use this product near or around water. It may cause fire or electric shock. Especially, do not use the product in the bathroom.
- If the product is transported directly fro a cold to a warm location, or if the room temperature has changed suddenly, the picture may be blurred or show poor color. This is because moisture has condensed on the mirror or lenses inside If this happens, let the moisture evaporate before using the product.
- Do not place the product on an unstable cart, stand, table, or shelf. The product may fall, causing serious injury to a chil or an adult, and serious damage to the product.
- Do not allow anything to rest on or roll over the power cord, and do not place th product where the power cord is subject to wear or abuse.

continue

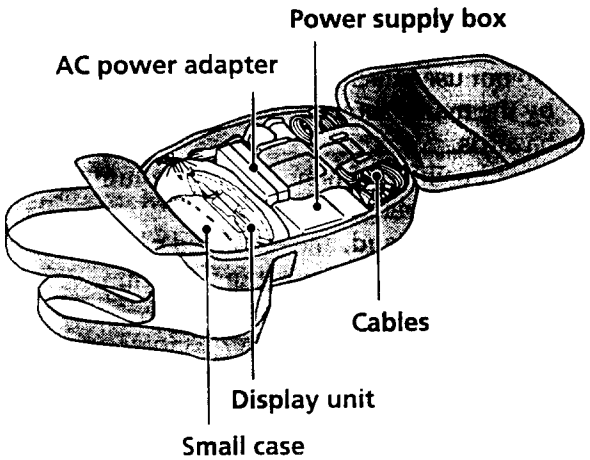
Precautions (continued)

Others

- Unplug the product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
  - When the power cord or plug is damaged or frayed.
  - If liquid has been spilled into the product.
  - If the product has been exposed to rain or water.
  - If the product has been subject to excessive shock by being dropped, or the cabinet has been damaged.
  - If the product does not operate normally when following the operating instructions. Adjust only those controls that are specified in the operating instructions. Improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal operation.
  - When the product exhibits a distinct change in performance — this indicates a need for service.
- Do not disassemble or remodel the product. It may cause fire or electric shock. Have the product checked and repaired at your Sony dealer or local authorized Sony service facility.
- Do not attempt to service the product yourself since opening the cabinet may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
- When replacement parts are required, be sure the service technician certifies in writing that he has used replacement parts specified by the manufacturer that have the same characteristics as the original parts.
  Unauthorized substitutions may result in fire, electric shock, or other hazards.
- Upon completion of ervice or repairs to the produc the service nician to erform tine safety checks (as spc ified b ie manufacturer) to determine that th oduct is in safe operating conditior l to so certify.
- Unplug the produ m the wall outlet before cleaning. (the product with a dry, soft cloth, o t cloth slightly moistened with l detergent solution. Do not use an of solvent, such as alcohol or be

Note on ca g

Use the supplied carrying cases whenever you carry the Glasstron. Put the display unit into the small case for protection. Put the display unit together with the power supply box and other accessories into the large case.



Error messages

The following error messages may appear to indicate the status of the Glasstron or input signal.

OUT OF SCAN RANGE

The input signal does not match the supported specification.
Change the screen resolution on your PC. For details of the signal compatibility, see "Signal compatibility" (page 35).

NO INPUT SIGNAL

The signal is not input.

- Make sure that the PC-VIDEO switch is correctly set.
- Make sure that the connected equipment is turned on.
- Make sure that the your PC is not in the power saving mode.

HIGH TEMPERATURE

The Glasstron temperature is high.
Turn off the Glasstron for a while, then turn on again.

Note

If you cover the ventilation hole of the power supply box, an error may occur due to a rise in temperature. In addition, it may cause a fire or malfunction of the unit.

Troubleshooting

If you have any questions or problems not listed below, contact your Sony de... or l... cal authorized Sony service facility.

Symptom	Cause	Remedy
The picture does not appear.	Connections are incorrect.	Connect the eq... ...ent ...orrectly (pages 15 to 20)
	The signal is not input.	Select the cor... ...nput (page 31).
	The Glasstron enters power save mode.	Put the Glas... ...t on again to bring the forehea... ...r to the POWER SAVING S... ...OR (page 14).
	When you connect to a notebook type PC, the display mode is set to local display mode (LCD panel of your notebook PC).	Change the display mode. For details, refer to the instruction manual of your PC.
The picture is dark or dim.	You are not wearing the Glasstron correctly.	Put on the Glasstron correctly (pages 21 and 22).
	—	Adjust the brightness with the BRIGHT control (page 32).
	—	Adjust the RGB signal synchronization (page 39).
	The inside window (where the picture is displayed) is dirty.	Clean the display unit with a soft, dry cloth.
The picture suddenly disappears.	A warning was displayed for more than two minutes. (The Glasstron turned off automatically.)	—
	You continued using the Glasstron for six hours. (The Glasstron turns off automatically after six hours to prevent eye fatigue.)	—
	The battery pack or batteries are dead.	Charge the battery pack or replace with new batteries (page 41).
	You put off the Glasstron while the POWER SAVE is set to ON.	Put the Glasstron on again to bring the forehead near to the POWER SAVING SENSOR (page 14).
The picture has no sound. The sound is noisy.	—	Adjust the volume with the VOL control (page 32).
The volume does not become louder.	The AVLS function is on.	Set AVLS in the menu to OFF (page 38).
	The equipments are not connected propely.	Connect the equipments correctly (pages 15 to 20).
	Sound volume of the connected computer is inappropriate.	Adjust the volume on the computer.
The battery pack discharges quickly.	The battery pack is not charged enough. The battery pack is completely dead.	Charge the battery pack fully or use a new one (page 41).

Symptom	Cause	Remedy
The battery pack is not charged.	The battery pack is not installed properly.	Install the battery pack properly (page 41).
	The battery pack is completely dead.	Replace the battery pack with a new one (page 41).
	The supplied AC power adapter is not used.	Use the supplied AC-PLM3 AC power adapter.
The black, red, and green dots do not disappear.	The LCD is made with high-precision technology. However, black points or bright points of light (red, blue, or green) may appear constantly on the LCD screen. This is not malfunction. (Effective dots: more than 99.999%)	—
The picture color is different.	The color intensity and hue are not adjusted.	Adjust the color intensity and hue in the menu screen (page 40).
The picture gets out of position in the PC mode.	The external display output signal of the connected computer does not match the supported input signal.	Change the screen resolution and the vertical frequency on your PC to match the supported output frequency (page 35). Refer to the instruction manual of your PC.
Noises appear on the picture in the PC mode.	The input signal does not match to the supported specification. See "Signal compatibility" (page 35). In this case, the picture does not appear correctly.	Change the screen resolution or the vertical frequency of the external display output signal on your PC to match the supported vertical frequency (page 35). Refer to the instruction manual of your PC.
	The horizontal frequency of the signal does not match to the supported specification. In this case, the flicker may appear on the right edge of the picture.	Change the display mode on your PC to the external monitor only (page 39).
The POWER switch does not function.	—	Disconnect the AC power cord from the wall outlet. After three minutes, reconnect the AC power cord.

Specifications

Power supply

AC power adapter: AC-PLM3
100-240 V AC, 50/60 Hz, 16 W
Output voltage 8.4 V, 1.6 A
Battery pack: NP-F550/NP-F750/
NP-F950 (not supplied)

Power consumption

10 W (approx., PC mode)
12 W (approx., VIDEO mode)

Operating temperature

41°F to 95°F (5°C to 35°C)

Storage temperature

14°F to 140°F (–10°C to 60°C)

Dimensions

Display unit:
Approx. $5\ ^{7}/_{8} \times 1\ ^{15}/_{16} \times 3\ ^{1}/_{2}$ inches
(Approx. 149 × 48 × 86 mm)
(w/h/d folded)
Power supply box:
Approx. $2\ ^{1}/_{4} \times 1\ ^{7}/_{8} \times 6\ ^{3}/_{8}$ inches
(Approx. 54 × 47 × 160 mm)
(w/h/d)
not including projecting parts and controls

Mass

Display unit: Approx. 4.2 oz (120 g)
Power supply box: Approx. 9.2 oz (260 g)

Video signal

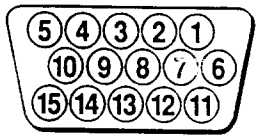
NTSC color, EIA standards

Input

PC mode

RGB signal: HD15

Pin Assignment



Pin No.	Signal
1	R (Red)
2	G (Green)
3	B (Blue)
4	–
5	GND
6	R (Red) GND
7	G (Green) GND
8	B (Blue) GND
9	–
10	GND
11	GND
12	–
13	SYNC (Horizo[illegible]l)
14	SYNC (Vertic[illegible])
15	–

PC AUDIO input: [illegible]reo minijack

VIDEO mode

AUDIO/VIDEO input: Special minijack
Video: 1 Vp-p, 75 ohms, unbalanced, sync negative
S VIDEO input: 4-pin mini DIN
Y: 1 Vp-p, 75 ohms, unbalanced, sync negative
C: 0.286 Vp-p, 75 ohms, unbalanced, sync negative

Screen resolution

Horizontal: 832 dots (max.)
Vertical: 624 lines (max.)

Supplied accessories

AC power adapter AC-PLM3 (1)
AC power cord (1)
RGB signal cable (1)
Audio/video cable (special miniplug ⟷ phono plug) (1)
S-video cable (1)
Audio/video cable (special miniplug ⟷ special miniplug) (1)
Audio cable (stereo miniplug) (1)
Adapter for Macintosh (1)
Carrying cases (2)
Sunshades (1 pair)
Operating Instructions (1)
Windows 95/Windows 98 PC Glasstron Information Disk (1)
Screen adjustment disk for Macintosh (1)
Warranty (1)

Design and specifications are subject to change without notice.

Index

A

AC power adapter 20
Accessories supplied 13, 48
Adjusting
  brightness 32
  color 40
  hue 40
  volume 32
AVLS 36, 38

B

Back strap 22
Battery pack 41

C, D, E, F, G

Carrying case 44
Charging a battery pack 41
Checking
  display unit position 23
  screen position 25
Color 40
Connection
  battery pack 41
  PCs 15
  power 20
  video equipment 18
Contrast 40

H

Health concerns 7
Horizontal position 39
Hue 40

I, J, K, L,

Instructions for safe fit 9

M, N, O

Mega bass 36, 38

P, Q

Password 28
Power save 38
Precautions 43

R

Remaining battery life 42
Resetting
  adjustment 40
  password 29

S, T, U, V

Safety instructions 6
Safety password 6, 9, 28
Screen alignment 26
Screen mode 34
See-through mode 34
Signal compotibility 35
Signal synchronization 39
Stereo earphones 22
Sunshades 22
Supplied accessories 13
S-video 19

T, U

Tracking 39

V

Vertical position 39

W, X, Y, Z

WARNING messages 23-25, 33
Warnings for electronic products 10
Wearing the Glasstron 21

SONY

Video Products

LIMITED WARRANTY

Sony Electronics Inc. ("Sony") warrants this Product (including any accessories) against defects in material or workmanship as follows:

1. LABOR: For a period of 90 days from the date of purchase, if this Product is determined to be defective, Sony will repair or replace the Product, at its option, at no charge, or pay the labor charges to any Sony authorized service facility. After the Warranty Period, you must pay for all labor charges.

2. PARTS: In addition, Sony will supply, at no charge, new or rebuilt replacements in exchange for defective parts for a period of one (1) year. After 90 days from the date of purchase, labor for removal and installation is available from Sony authorized service facilities or a Sony Service Center at your expense.

To obtain warranty service, you must take the Product, or deliver the Product freight prepaid, in either its original packaging or packaging affording an equal degree of protection, to any authorized Sony service facility.

This warranty does not cover customer instruction, installation, set up adjustments or signal reception problems.

This warranty does not cover cosmetic damage or damage due to acts of God, accident, misuse, abuse, negligence, commercial use, or modification of, or to any part of the Product, including the antenna. This warranty does not cover damage due to improper operation or maintenance, connection to improper voltage supply, or attempted repair by anyone other than a facility authorized by Sony to service the Product. This warranty does not cover Products sold AS IS or WITH ALL FAULTS, or consumables (such as fuses or batteries). This warranty is valid only in the United States.

Proof of purchase in the form of a bill of sale or receipted invoice which is evidence that the unit is within the Warranty period must be presented to obtain warranty service.

This warranty is invalid if the factory applied serial number has been altered or removed from the Product.

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To locate the servicer or dealer nearest you, or for service assistance or resolution of a service problem, or for product information or operation, call:

Sony Direct Response Center
1-(800)-222-7669
or write to:
Sony Direct Response Center
12451 Gateway Blvd.
Fort Myers, FL 33913

For an accessory or part not available from your authorized dealer, call:

1-(800)-488-SONY (7669)

Sony on line

http://www.world.sony.com/

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3-865-654-01(1)

Windows® 95/ Windows® 98 PC Glasstron Information Disk

インストールガイド

Installation Guide

Guide d'installation

Installationsanleitung

Guía de instalación

Guida all'installazione

Personal LCD Monitor

PC Glasstron

PLM-S700/S700E

Sony Corporation ©1998 Printed in Japan

English

The "Windows 95/Windows 98 PC Glasstron Information Disk" includes the information file on choosing the correct screen resolutions. When you use Microsoft Windows 95 or Windows 98, you must match the screen resolution of the Glasstron to the output signal of your computer for optimal Glasstron performance. In order for the Glasstron to receive the output signal from the computer correctly, and to set up the functions of the Glasstron, install the files from the disk onto the hard disk of your computer using Windows 95 or Windows 98.

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Installing the "Windows 95/Windows 98 PC Glasstron Information Disk"

1 Start Windows 95 or Windows 98.
2 Click [Start], then point to [Settings] and click [Control Panel].
3 Double-click the [Display] icon.

For Windows 95

4 Click the [Setting] tab, then click the [Change Display] button.
5 Click the [Change...] button.
Or
4 Click the [Settings] tab, then click the [Advanced Properties] button.
5 Click the [Monitor] tab on the [Advanced Display Properties] dialog box, then click the [Change (Monitor Type)] button.
6 Click the [Have Disk...] button on the [Select Device] dialog box.
7 Insert the "Windows 95/Windows 98 PC Glasstron Information Disk" into the floppy disk drive.
8 Type the drive name of the inserted "Windows 95/Windows 98 PC Glasstron Information Disk" (Default: a:\) in the [Copy manufacture's files from] box in the [Install From Disk] dialog box, and click the [OK] button.
9 Select the display model you use in the [Models:] box.
10 Restart your computer to apply the new setting.

For Windows 98

4 Click the [Settings] tab, then click the [Advanced Properties] button.
5 Click the [Monitor] tab, then click the [Change] button.
6 Click the [Next] button.
7 Click the radio button beside [Display a list of all the drives in a specific location, so you can select the drive you want], then click the [Next] button.
8 Click the [Have Disk] button.
9 Insert the "Windows 95/Windows 98 PC Glasstron Information Disk" into the floppy disk drive. Type the drive name of the inserted "Windows 95/Windows 98 PC Glasstron Information Disk" (Default: a:\) in the [Copy manufacture's files from] box in the [Install From Disk] dialog box, and click the [OK] button.
10 Click the [Next] button and check the message, then click the [Next] button again.
11 Click the [Finish] button.
12 Click the [Apply] button, then click the [OK] button.
13 Restart your computer to apply the new setting.

SONY

3-865-887-01(1)

Windows® 95/Windows® 98 PC Glasstron Information Disk/Screen adjustment disk for Macintosh

取扱説明書/Operating Instructions/Mode d'emploi/
Bedienungsanleitung/Handleiding/Bruksanvisning/
Käyttöohjeet/Bruksanvisning/Betjeningsvejledning/
Manual de instruções/
Manual de instrucciones/Istruzioni per l'uso/
Οδηγίες Χρήσης

Personal LCD Monitor

PC Glasstron

PLM-S700/S700E

Sony Corporation ©1998 Printed in Japan

The "Windows 95/Windows 98 PC Glasstron Information Disk" and "Screen adjustment disk for Macintosh" contain the PC Glasstron ADJ Tool for performing the correct screen adjustment.
The "Windows 95/Windows 98 PC Glasstron Information Disk" includes the information file on choosing the correct screen resolutions. Refer to the "Installation Guide" for the installation procedure. For Macintosh, refer to the instruction manual supplied with your computer to set the correct screen resolution.

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- Macintosh is a trademark licensed to Apple Computer, Inc., registered in the U.S.A. and other countries.
- All other product names mentioned herein may be the trademarks or registered trademarks of their respective companies. Furthermore, "™" and "®" are not mentioned in each case in this manual.

Displaying the adjustment screen

Before starting the screen adjustment, be sure to connect the Glasstron to your computer, and check the display unit position and the screen position adjustment. For details, refer to the Operating Instructions of the Glasstron.
After checking, display the adjustment screen following the procedures below.

For Windows 95 or Windows 98

1 Start Windows 95 or Windows 98.
2 Insert the "Windows 95/Windows 98 PC Glasstron Information Disk" into the floppy disk drive.
3 Double-click the [My Computer] icon
4 Double-click the [3½ Floppy] icon.
5 Double-click the [PC Glasstron ADJ Tool] icon.

For Macintosh

1 Start Macintosh.
2 Insert the "Screen adjustment disk for Macintosh" into the floppy disk drive.
3 Double-click the icon in the Floppy Disk window.

Notes

- When you use Windows 95 or Windows 98, install the information file included in the supplied Windows 95/Windows 98 PC Glasstron Information Disk, and select the correct screen resolution.
- When you use a notebook PC, you may not be able to perform the screen adjustment correctly. In this case, change the display mode on your notebook PC to the external monitor only.

Adjusting the screen

After the adjustment screen appears, press the MENU button on the power supply box. Perform the fine adjustment following the procedure below.

V CENT

1 Turn the jog dial to select V CENT, and press the jog dial.
2 Adjust the line positions by turning the jog dial to display both the upper and bottom lines (refer to illustration A), and press the jog dial.

H CENT

1 Turn the jog dial to select H CENT, and press the jog dial.
2 Adjust the line positions by turning the jog dial to display both the left and right lines (refer to illustration B), and press the jog dial.

Note

If the adjustment is not successful, adjust TRACKING first, then try again.

TRACKING

1 Turn the jog dial to select TRACKING, and press the jog dial.
2 Adjust the screen by turning the jog dial until vertical stripes do not appear in area Ⓐ of the screen (refer to illustration C), and press the jog dial.

Note

If the tracking is not correct, dim vertical stripes appear. Adjust the tracking again.

SYNC

1 Turn the jog dial to select SYNC, and press the jog dial.
2 Adjust the screen by turning the jog dial to clear the vertical thin lines (refer to illustration D), and press the jog dial.

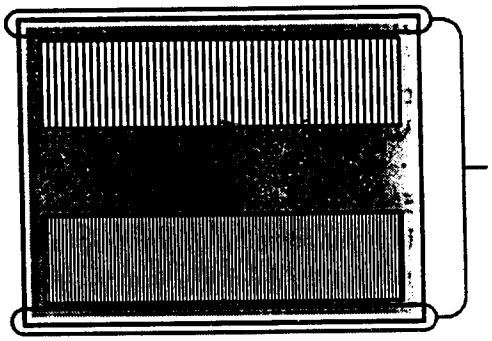
Notes

- If the frequencies are not synchronized, horizontal noise appears on the vertical thin lines. Adjust to minimize the horizontal noise.
- If the tracking is not correct, horizontal noise appears on the vertical thin lines. Adjust the tracking again.

Finishing the screen adjustment

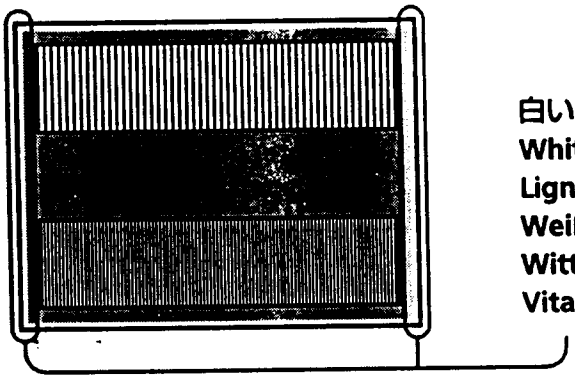
1 Press the MENU button on the power supply box so that the adjustment screen disappears.
2 Click the screen when the pointer appears.
3 Eject the floppy disk.

A



白いライン
White lines
Lignes blanches
Weiße Linien
Witte lijnen
Vita linjer

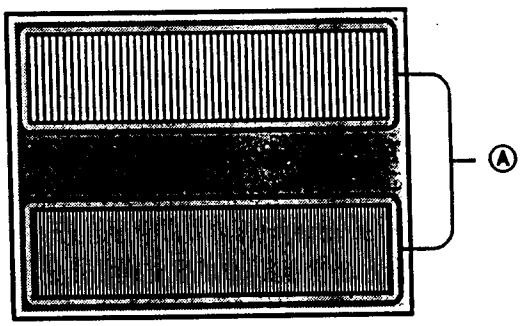
B



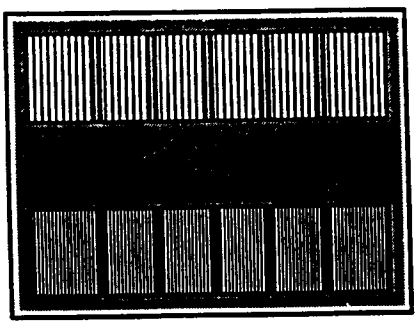
白いライン
White lines
Lignes blanches
Weiße Linien
Witte lijnen
Vita linjer

C

正しい
Correct
Correct
Richtig
Juist
Rätt

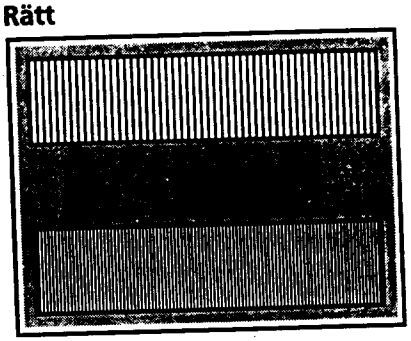


正しくない
Incorrect
Incorrect
Falsch
Fout
Fel



D

正しい
Correct
Correct
Richtig
Juist
Rätt



正しくない
Incorrect
Incorrect
Falsch
Fout
Fel